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The Geographic Medicare Economic Index: Alternative Approaches

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Stephen Zuckerman*
Gregory Pope**

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** Center for Health Economics Research

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TABLE OF CONTENTS

I.	INTRODUCTION	1
	Review of the Interim GMEI	2
II.	PHYSICIANS' OWN TIME	6
	Education Adjustment	7
	Place of Work	8
	Occupation-Mix Adjustment	12
	Reducing Sampling Variability	14
	Discussion of Technical Alternatives	18
	Policy Alternatives	20
III.	COST SHARES AND OTHER PRICE PROXIES	24
	Cost Shares	24
	Malpractice Insurance Premiums	26
	Office Rents	28
	Nonphysician Employee Wages	30
IV.	GMEI ALTERNATIVES	37
	Baseline GMEI	37
	Analysis of Alternatives	41
V.	UPDATING THE CENSUS-BASED PRICE PROXIES	49
	Consumer Price Index (CPI) for Both Proxies	49
	Current Population Survey (CPS) for Both Proxies	52
	Area Wage Survey for Employee Wages	60
	Recommendation	66
VI.	THE ISSUE OF PHYSICIANS IN RURAL AREAS	67
	Policy Options	71
VII.	CONCLUSION	75
REFER	ENCES	79
APPEN	DIX A. Description of Census Data	
APPEN	DIX B. Input Price Proxies and GMEIs by MSA and Rural Area of States	
APPEN	DIX C. Input Price Proxies and GMEIs by Carrier Locality	

LIST OF TABLES

II.1	Place of Residence vs. Place of Work: Alternative Physician Price Proxies for Consolidted MSAs	10
11.2	Average Sample Sizes for Subcategories of Professional Specialty Occupations by Metropolitan Area Population	15
11.3	Average Sample Sizes for Subcategories of Professional Specialty Occupations in MSAs of Fewer than 250,000 People by Type of Census Sample	16
11.4	Alternative Proxies for Physicians' Own Time Based on Professional Specialty Occupations: Means and Standard Deviations by Metropolitan Area Population	19
II.5	Alternative Proxies for Physicians' Own Time Not Based on Professional Specialty Occupations: Means and Standard Deviations by Metropolitan Area Population	22
III.1	Input Cost Shares: 1983, 1985, 1987	25
111.2	1985 and 1986 Relative Malpractice Insurance Premiums for a \$100,000/\$300,000 Mature Claims-Made Policy, by State	27
III.3	Employee Wages (Normalized): Percentiles and Standard Deviations	33
III.4	Employee Wages (Normalized) by Metropolitan Area Population	34
111.5	Occupational Expenditure Shares for the Employee Proxy	35
IV.1	Input Price Proxies: Percentiles and Standard Deviations	38
IV.2	Input Price Proxies and GMEI Means by Metropolitan Area Population	40
IV.3	Comparison of Alternatives to Baseline GMEI	42
IV.4	Average Percent Difference between Alternatives and Baseline GMEI by Metropolitan Area Population	45

LIST OF TABLES (continued)

IV.5	Comparison of Alternatives to Baseline GMEI, by Metropolitan Area Population	46
v.1	Consumer Price Indices by Metropolitan Area Size and Region	51
v.2	Weighted Median Hourly Earnings	54
v.3	Update Factors for the Census-Based Price Proxies	55
v.4	Average Annual Earnings, All Workers	57
v.5	Relative Impact of Update Factors on Census-Based Price Proxies	59
V.6	Percentage Change in GMEI Employee Wage Proxy: 20 Most Populous MSAs, Ranked from Highest to Lowest, 1979-1985	63
v.7	Percentage Change in GMEI Employee Wage Proxy: 10 Largest Increases and 10 Largest Decreases, 1979-1985	64
v.8	Relative Impact of Area Wage Survey Update Factors on the Employee Proxy	65
VI.1	Input Cost Shares: Rural vs. Urban	70

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I. INTRODUCTION

Any reforms in Medicare physician payment policies that involve a national fee schedule or modifications of fees under the current payment methodology may recognize some differences in practice costs. These differences are likely to relate to the geographic areas in which the physicians are located, according to the 1986 Omnibus Budget Reconciliation Act. To be part of a fee adjustment based on practice costs, a geographic practice cost index was mandated by Congress. Interim versions of that index — the Geographic Medicare Economic Index (GMEI) — were described in a report to HCFA (Zuckerman, Welch, and Pope, 1988).

Since that report was completed in a limited time period, its indices were not intended for actual payment. Instead, the interim indices allowed us to address conceptual issues, to review data sources on practice cost variation, and to develop an approach for an index that could be used for payment. This report describes the steps undertaken to refine the interim indices to create indices with fewer methodological compromises, which were due mostly to limited data.

The primary refinement in these indices is the use of earnings data from the 20 percent sample of the 1980 Census; the interim indices were based on the 1 percent public use sample of the Census. These new data substantially reduce sampling error. In addition, geographic differences in earnings are measured based on workers' place of work instead of on place of residence, and occupational—mix variation across areas can be accounted for. These new data were used to develop new proxies for the costs of physicians' own time and employee wages.

A second set of refinements involved more current data. The cost share weights as well as the office rent and malpractice insurance price measures were updated. We also analyzed a methodology for updating the Census-based earnings proxies for physician and employee costs. Since there are no generally accepted techniques for updating Census earnings data at the metropolitan-area level, we developed several ways to do so.

Beyond refining the technically-derived indices, this report computed indices that may be considered in the policy debate. We selected these options on the basis of formal proposals that have already been made as well as by trying to anticipate concerns about the more technical alternatives. We contrasted technical and policy options.

Finally, we focused on the appropriateness of using these indices to establish payment rates in rural areas. This issue deserves special attention because of Congressional concern that any index not exacerbate problems associated with the uneven geographic distribution of physicians. Therefore, we considered options that address this possible problem within the technical structure of the GMEIs.

Review of the Interim GMEI

We retain the same basic index — in terms of index form, components, and geographic areas — used in our interim report. Developing an interim GMEI required choices about the technical structure of the index, the definition of geographic areas for which the index would be computed, and the applicability of available data sources. To develop the interim GMEI within six months, it was essential for us to draw on existing theory, policy instruments, and data whenever possible.

With this in mind, deciding on the technical structure of the interim GMEI was fairly straightforward. We chose to adopt a Laspeyres input price index that included prices for physicians' own time, employee wages, office rents, malpractice insurance, medical supplies, medical equipment, and miscellaneous other expenses. In a Laspeyres index, the cost of a market basket of goods (in this case, inputs) is compared across areas. The index captures only geographic differences in input prices, so it is not biased by geographic differences in the types of services physicians provide. HCFA has been using this basic structure since 1975 to monitor the national rate of increase in practice costs through the Medicare Economic Index (MEI).

The major criticism of a Laspeyres index is that it does not allow for substitution within the market basket in response to changes in relative prices. Since physicians tend to move away from higher cost inputs, by not allowing for substitution a Laspeyres index overstates variation in the actual costs of practice. While this is a clear theoretical concern, the broad definition of the input categories and a number of studies reviewed for this project, including one on the MEI, suggest that substitution bias is not a serious empirical issue.

The choice of GMEI areas was less straightforward but, nonetheless, again we were able to draw on a current HCFA payment methodology. The areas for a physician geographic input price index should satisfy two criteria: (1) homogeneity in input prices, so that there is more between—than within—area variation in costs; and (2) size large enough geographically so that the areas are self—contained markets to minimize border—crossing. Unfortunately, these are conflicting goals. The first criterion suggests very small areas (e.g., counties or zip codes), the latter very large ones (e.g., states or census divisions).

The middle ground to break this conceptual stalemate is the Metropolitan Statistical Area (MSA)—aggregations of adjacent counties with close economic and social ties. The MSA is large enough to eliminate most border-crossing and yet is a single market, so prices tend to vary little. Using the MSA required special treatment for non-MSA areas. Our approach grouped these non-MSA areas into county aggregates on a state-by-state basis. This basic MSA/non-MSA pattern is used for the area wage index (another input price index) employed in the prospective payment system for hospitals (PPS), which serves as a policy precedent for its use here.

The remaining components needed for the computation of a GMEI were two types of data: (1) area—specific input price data (or price proxy data) for each of the practice cost components to be explicitly included in the index; and (2) data on the cost shares that serve as the weights in the Laspeyres index. Since the cost shares can be computed as the proportion of total practice revenues expended for each input, a detailed survey of practice characteristics provides a viable source of the second type of data. We concluded that AMA Socioeconomic Monitoring System data, that can be annually updated, provided a reasonable set of cost shares.

The potential sources of input price data were considerably less rich.

With the exception of malpractice insurance, only proxy data could be found.

Malpractice insurance premiums were derived from a comprehensive set of insurer rate sheets collected by HCFA's Survey of Insurers for use in the MEI calculation. A proxy for office rents was taken from the Department of Housing and Urban Development Fair Market Rent series used in the computation of rental subsidies. Although these data measure area differentials in housing costs as opposed to office costs, the policy precedent for using housing as a proxy for office rent was established when the housing component of the CPI was chosen as

the price proxy for office rents in the MEI. Price proxies for the remaining nonlabor inputs—supplies, equipment, and "other"—were unavailable. Since area variations in these prices are probably less than those found in the other input prices, we treated these factors as national inputs for the purposes of developing an interim index.

Price proxies for the labor inputs—physician and nonphysician—were developed from the 1 percent public use sample of the 1980 Census of Population and Housing. Although these data may not be as current as other cross—sectional wage information, they are the most complete in terms of both occupational and area coverage. For the nonphysician labor inputs price proxies were computed from earnings of administrative support personnel, health technologists and technicians, and registered nurses. We controlled for hours worked.

Although physician earnings data are available from the Census, it would have been inappropriate to use these data to adjust geographically skewed fees because these fees are, in large part, the determinants of the earnings patterns. As an alternative, we used hourly earnings of workers in the professional specialty occupations with four or more years of college to derive a proxy for the physician earnings component of the GMEI. Since this component has the largest weight and is the only input for which there are no readily observed market prices, we closely evaluated the choice of this price proxy. Modifications in the occupational group altered the geographic variation in the proxy, but the education cutoff (used to obtain workers who might have preferences more similar to those of physicians) made little difference.

II. PHYSICIANS' OWN TIME

As argued in our interim report, the fundamental reason to allow for geographic variation in the physicians' own time component of the GMEI is to compensate physicians at the same real rate in all areas. The appropriate amount of variation would be reflected in the geographic earnings differentials of a group of workers who can be viewed as being similar to physicians with respect to the types of goods and services they purchase and their preferences for area amenities. A proxy based on these earnings differentials would capture both cost of living and valuation of amenities. It would not perpetuate distortions that may be present in the current geographic distribution of physician incomes.

The only comprehensive data source on geographic earnings differences (at the level required for the GMEI) is the 1980 Census of Population and Housing. When the interim indices were developed, the only data available from this source was the 1 percent public use sample. This limited sample necessitated basing the physician proxy on the median hourly earnings of professional workers with 4 or more years of college education. We reasoned that these college-educated professionals provided the best proxy group for physicians. However, we were aware that this proxy had several problems that could be corrected with the 20 percent sample of the Census, which we now have.

The most obvious difficulty with the 1 percent sample is that in many areas earnings data were available for few professional workers, leading to imprecise estimates of median earnings in small areas. Random variations created by small samples led to anomalies in the interim indices. Although the larger sample in the 20 percent data reduces this randomness, the importance of

these data go well beyond this obvious strength. The 20 percent data make possible three other improvements:

- o drawing a sample with a slightly higher level of education to improve the comparability to physicians;
- o using data on each area's labor force as opposed to each area's residents (this is important where there is much commuting to work between areas); and
- controlling for differences across areas in the mix of occupational groups of professionals.

We describe each of these refinements prior to reviewing the actual proxies derived from these new data. We first describe the educational adjustment—because that is easily dispensed with—and the place—of—work data, because we judge its use to be the most important improvement in this chapter. We then discuss occupation—mix adjustments, the tradeoffs of which depend on these other two changes.

Education Adjustment

The basic purpose of the education adjustment is to restrict the proxy group to professionals whose preferences are expected to closely coincide with those of physicians. Since physicians have extensive graduate school training, it might be desirable to base the proxy on a similarly educated group. However, very few professionals have as many years of graduate training as physicians. We have chosen to use professional workers with any graduate education experience. Therefore, we computed median hourly earnings from the 20 percent sample for professional workers with at least 5 years of college. This is an improvement over our interim (1 percent sample) approach, in which sample size constraints forced us to include people with 4 years of college as well. About 45 percent of professionals have at least 5 years of college.

Place of Work

The 1 percent public use sample categorized workers into geographic areas based on where they lived, not where they worked. However, since physicians are paid according to where their practices are located, the proxy for physicians' own time should reflect earnings based on where professionals work. The area in which the individual works is available for one-half of the 20 percent sample. The Bureau of the Census indicated that there are no systematic biases as to the types of people for whom place-of-work data are reported.

To understand in which types of MSAs using place-of-work data is important, one must understand the structure of metropolitan areas, as defined by the Census Bureau. MSAs have central counties and may include outlying counties with close economic and social ties with the central counties. For adjacent MSAs to be consolidated, at least 15 percent of the workers residing in the smaller MSA must commute to work in the larger MSAs (Census, 1986, 627).

MSAs with populations in excess of one million may be subdivided. If so, the original MSA is redesignated a Consolidated MSA (CMSA) and its components Primary MSAs (PMSAs). PMSAs must have a large urbanized county and local opinion must support the designation. CMSA is considered the more basic unit.

These definitions suggest that commuting between MSAs is most common between PMSAs in the same CMSA. Furthermore, since earnings can differ by place of work and place of residence only when workers commute between areas, use of place-of-work data is most important within CMSAs. Nationally, 6 percent of workers living in an MSA worked outside it, usually in another MSA (Census, 1984, 1). Within CMSAs this percentage tends to be higher. For instance, 24 percent of workers living in the Nassau-Suffolk MSA commute to

other MSAs, mainly the New York MSA; and 19 percent of workers living in the Anaheim MSA commute to other MSAs, mainly the Los Angeles MSA (Census, 1984).

We predict that switching from place-of-residence data to place-of-work data will increase the proxy in the central PMSAs and decrease it in the "bedroom" PMSAs. A basic theory of spatial economics is that wages by place of work are highest at the center of an urban area and fall as one moves away from the center. There is, however, no presumption that wages by place of residence are highest in the center of urban areas. Plausibly, the people with the highest earnings live in attractive suburbs.

We have computed education—and occupation—adjusted earnings by both the place of residence and place of work in order to test the impact of these alternatives. (The precise nature of the occupation—mix adjustment is discussed below.) As expected, data in Table II—1 show that the earnings proxy for the central MSA in 12 of the 17 CMSAs rises, while that in the "bedroom" MSAs falls when place of work is used instead of place of residence. The results are particularly striking in the largest CMSAs (i.e., New York, Los Angeles, Chicago, San Francisco and Philadelphia, in order of size). For instance, using place—of—work data lowers the proxy for the Nassau—Suffolk MSA from 1.31 to 1.24 and raises it for the New York MSA from 1.20 to 1.24. For the Orange County MSA, the least urbanized MSA in the New York CMSA, the proxy falls from 1.08 to .99.

In the Chicago CMSA, the proxy for the Chicago MSA increases from 1.15 to 1.17. In contrast, the proxy for Lake County, an MSA immediately to the north of the Chicago MSA, the proxy falls from 1.27 to 1.04, which is the largest change. Outside of CMSAs, earnings by place of work and place of residence are virtually the same, exhibiting no major patterns.

Table II-1

Place of Residence vs. Place of Work: Alternative Physician Price Proxies for Consolidated MSAs

CMSA Name	PMSA Name	Place of Residence	Place of Work ^a	Difference
Buffalo	Buffalo, NY	1.043	1.036	-0.004
	Niagara Falls, NY	1.055	1.069	0.016
Chicago	Aurora-Elgin, IL	1.015	0.955	-0.058
	Chicago, IL	1.154	1.175	0.023
	Joliet, IL	1.047	1.051	0.006
	Lake County, IL	1.266	1.045	-0.219
	Gary-Hammond, IN	1.063	1.040	-0.021
	Kenosha, WI	1.050	0.946	-0.102
Cincinnati	Cincinnati, OH-KY-IN	0.957	0.956	0.002
	Hamilton-Middleton, OH	0.952	0.962	0.012
Cleveland	Akron, OH	0.987	0.973	-0.012
	Cleveland, OH	1.057	1.076	0.021
	Lorain-Elyria, OH	1.002	0.951	-0.049
Dallas	Dallas, TX	0.975	0.984	0.010
	Fort Worth-Arlington, TX	0.900	0.893	-0.006
Denver	Boulder-Longmont, CO	0.933	0.948	0.017
	Denver, CO	1.065	1.079	0.016
Detroit	Ann Arbor, MI	1.015	1.013	-0.000
	Detroit, MI	1.247	1.249	0.004
Houston	Brazoria, TX	1.058	1.102	0.047
	Galveston-Texas City, TX	0.959	0.928	-0.029
	Houston, TX	1.058	1.056	0.000
Los Angeles	Anaheim-Santa Ana, CA	1.204	1.184	-0.018
	Los Angeles-Long Beach, CA	1.220	1.238	0.020
	Oxnard-Ventura, CA	1.167	1.135	-0.030
	Riverside-San Bernardino, CA	1.111	1.105	-0.004
Miami	Fort Lauderdale-Hollywood-Pompa	1.001	0.974	-0.025
	Miami-Hialeah, FL	1.126	1.148	0.025
Milwaukee	Milwaukee, WI	1.030	1.031	0.003
	Racine, WI	1.069	1.123	0.056

Table II-1 (continued)
Page 2

CMSA Name	PMSA Name	Place of Residence	Place of Work ^a	Difference
New York	Bergen-Passaic, NJ	1.193	1.123	-0.068
New TOLK	Jersey City, NJ	1.043	1.142	0.102
	Middlesex-Somerset-Hunterdon, NJ	1.184	1.164	-0.017
	Monmouth-Ocean, NJ	1.213	1.165	
	Newark, NJ	1.232	1.196	-0.034
	Nassau-Suffolk, NY	1.308	1.245	-0.061
	New York, NY	1.201	1.237	0.039
	Orange County, NY	1.081	0.993	-0.086
Philadelphia	Wilmington, DE-NJ-MD	1.131	1.171	0.042
•	Trenton, NJ	1.101	1.132	0.034
	Vineland-Millville-Bridgeton, NJ	1.013	0.930	-0.082
	Philadelphia, PA-NJ	1.075	1.076	0.003
Pittsburgh	Beaver County, PA	0.968	0.957	-0.008
-	Pittsburgh, PA	1.015	1.027	0.014
Portland	Portland, OR	0.969	0.972	0.005
	Vancouver, WA	1.081	1.037	-0.042
San Francisco	Oakland, CA	1.142	1.113	-0.026
	San Francisco, CA	1.127	1.151	0.027
	San Jose, CA	1.206	1.191	-0.012
	Santa Cruz, CA	1.097	1.023	-0.072
	Santa Rosa-Petaluma, CA	1.070	1.052	-0.015
	Vallejo-Fairfield-Napa, CA	1.073	0.981	-0.090
Seattle	Seattle, WA	1.066	1.076	0.012
	Tacoma, WA	1.090	1.080	-0.008

a. Because average earnings in CMSAs are greater by place of work than place of residence, these figures have been renormalized.

Occupation-Mix Adjustment

A problem with using the median earnings of all professionals is that areas have different mixes of professional occupation groups. For instance, Huntsville, Alabama, a small MSA with a major National Aeronautics and Space Administration (NASA) facility, has a disproportionate share of engineers. Because engineers as a group are paid more than the average professional, this would inappropriately increase the median for Huntsville. Conversely, if a lower-income occupation, such as teachers, is over-represented in an area, this would inappropriately lower the area's proxy. The 1 percent data did not provide a sufficient sample to disaggregate the professional group into component occupations and correct for occupation mix. Such a correction, however, is feasible with the 20 percent data.

To correct for occupation mix, we computed the weighted sum of the earnings of each professional specialty occupation. We calculated an occupation-adjusted proxy:

$$P_{i} = \sum_{\substack{M \\ M_{j}}}^{M_{ij}} w_{j}$$

where M_{ij} is the median earnings in area i of occupational group j, M_{j} is the national median for occupation j, and w_{j} is the group's weight. Professionals vary with respect to the numbers of hours worked and hourly earnings. We weighted each group's median earnings by it share of national professional earnings (as derived from the 1980 Census data).

This is equivalent to weighting an occupational group by its national share of hours worked, summing across occupational groups, and dividing by the national average professional wage.

The specific subgroup occupations are largely determined by the standard occupational classifications (SOC) and the available sample sizes. The SOC provides for two major disaggregations of the professional specialty group.

The first—a 1-digit classification—breaks professionals into seven broad categories. Only six of these categories are used in our index because one is dominated by physicians, whose earnings should not be included in the GMEI. The second classification—2-digit—disaggregates the six 1-digit categories in fourteen subgroups. The 2-digit groupings could provide a more detailed occupation adjustment than the 1-digit categories. Many areas have few workers in several 2-digit occupational groups.

Before considering the details of how one could adjust for occupation mix, it is useful to demonstrate that adjustment can yield plausible improvements. One would expect an occupation adjustment to lower the proxy the most in areas with a high concentration of engineers and natural scientists: Huntsville, Alabama, as mentioned, has a large NASA facility; Melbourne-Titusville, Florida, has the Cape Kennedy Space Center; and Poughkeepsie, New York, is the headquarters of IBM. Place-of-work data with an education adjustment yields the following proxies:

		Unadjusted	Adjusted*	Difference
Huntsville, AL	FL	1.12	.96	16
Melbourne-Titusville,		1.06	.92	14
Poughkeepsie, NY		1.16	1.04	12

^{*} The adjustment uses a 1-digit classification.

These proxies are among those with the 10 largest drops, as consistent with our expectations.

Needless to say, occupation adjustment increases the proxy in some areas, although identifying such areas beforehand is more difficult. The three MSAs with the largest increases are:

	Unadjusted	<u>Adjusted</u>	Difference
Athens, GA	.76	.90	+.14
Wausau, WI	.98	1.10	+.12
Bryan-College Station,	TX .81	.93	+.12

Reducing Sampling Variability

Since the sampling variability of medians falls as sample size increases, small sample sizes imply relatively imprecise estimates of medians. To show how sample size limits the type of occupation—adjustment that is feasible, we have arrayed average sample size for each of the 1—digit and 2—digit categories by MSA size and for nonmetropolitan areas (Table II—2). The problem is most likely to occur among MSAs with fewer than 250,000 population. (There are no formal criteria to establish when a sample size is too small to be used.)

Eight of the fourteen 2—digit occupations have average sample sizes of fewer than ten in these 163 small metropolitan areas. In fact, there are a number of areas with no workers in several occupations. Given these data, it seems clear that the 2—digit classification should not be used to adjust the median earnings of professionals, at least if the data pertain to 5 or more years of college and are based on place of work.

Although the sample sizes for the 1-digit categories are larger, they could also produce excessive random variation among small MSAs. The only way to substantially increase sample size is to remove the education adjustment or to base the proxy on place of residence as opposed to place of work. Table II-3 shows the impact of these strategies on the average sample sizes among MSAs with fewer than 250,000 population. Working with place-of-residence data

Table II-2

Average Sample Sizes for Subcategories of Professional Specialty Occupations by Metropolitan Area Population (Place-of-Work Sample)

		Metrop	olitan Are	a Populat	tion (mill	lions)
Occupation	Rural	<.25	.255	.5–1	1-3	>3
1-DIGIT CATEGORIES						
Engineers Natural scientists,	53	19	51	125	400	1339
mathematicians Social scientists, social	36	11	26	64	187	778
workers, lawyers	200	39	94	227	605	2869
Teachers	842 72	138 15	307 37	669 83	1483	5270 846
RNs, pharmacists Writers, artists,	12	12	3/	03	215	040
athletes	30	8	19	51	144	953
2-DIGIT CATEGORIES						
Engineers Computer, math	- 53	19	51	125	400	1339
occupations	5	3	8	25	77	426
Natural scientists	31	9	17	39	111	352
Social scientists	19	5	12	32	85	510
Social workers	106	17	41	89	205	737
Lawyers	75	17	42	106	315.	1622
Teachers, college Teachers, non-	145	38	61	145	244	936
college	635	89	219	462	1112	3830
Voc-ed counselors	37	7	15	33	70	259
Librarians	304	58	137	327	684	2948
RNs	24	7	16	36	109	447
Pharmacists	49	9 5 3	20	47	106	399
Writers, artists	17	5	12 7	31	96	571 360
Editors, reporters	10	3	/	18	44	369
NUMBER OF AREAS	49	163	68	44	35	7

Only workers with at least five years of college are included in these samples

Table II-3

Average Sample Sizes for Subcategories of Professional Specialty Occupations in MSAs of Fewer than 250,000 People by Type of Census Sample

	PLACE WOR		PLACE OF RESIDENCE	
Occupation Category	High Educ. Level	All Educ. Levels	High Educ. Level	Weights
Engineers, Surveyors, and Architects	19	65	42	.140
Natural Scientists and Mathematicians	11	27	24	.067
Social Scientists, Social Workers, and Lawyers	39	64	83	.259
Teachers, Counselors, and Librarians	138	. 238	303	.436
RNs and Pharmacists	15	82	33	.056
Writers, Artists, and Editors	8	50	19	.042

High education levels means at least 5 years of college.

would double the sample. Removing the education adjustment expands the sample by a factor of from two to six, depending on the occupation subgroup.

Neither of these approaches, applied to all MSAs, would reduce random variation costlessly. To the extent that there is a large amount of commuting across MSA boundaries or that highly-educated professionals have different preferences than other professionals, either strategy could introduce biases into the GMEI. Of course, since the true proxy cannot be known, the extent of these biases cannot be determined. At best, what we can and will do is test the sensitivity of the price proxies and the GMEI to these modifications.

The final column of Table II-3 shows the weights that are applied to each 1-digit occupation's relative median earnings (relative to a national average median) to compute the occupation-adjusted proxy. Clearly, the most important subgroup in this proxy is "teachers, librarians, and counselors," with a weight of 0.436. The "social scientists" category, that includes lawyers, is the second largest (weight = 0.259), followed by "engineers" (weight = 0.140). These weights were computed from the national sample of professionals with 5 or more years of college. When the proxy that removes the education adjustment is computed, the weights are recomputed using all professionals as the base. This tends to give "teachers" and "social scientists" a lower weight, while raising the weights for all other subgroups.

A third strategy for increasing sample sizes recognizes that place-of-work and place-of-residence data are preferable in different types of MSAs.

Consolidated MSAs have considerable between-MSA commuting and large sample sizes in most component MSAs. Place-of-work data are preferable there. MSAs not in CMSAs have little between-MSA commuting. Many of these MSAs are small and have small sample sizes. Therefore, place-of-residence data and the larger samples they afford are preferable there. The strength of this proxy is that

it would increase the precision of our estimates, while still incorporating adjustments for educational attainment, occupation mix, and commuting patterns. The weakness is that combining place-of-work and place-of-residence earnings data may imply a degree of complexity or arbitrariness not desired in a policy tool. Considering only narrow technical grounds, we judge this to be the best proxy. Therefore, in evaluating the various technical alternatives for the physicians' own time proxy, we use this "combined" proxy as a baseline.

Discussion of Technical Alternatives

For the technical alternatives for the physician proxy, means and standard deviations are computed by urban/rural status and MSA size. Recall that all means are expressed relative to a national average, so that 1.05 implies median earnings 5 percent above a national average. The first two columns of Table II-4 have proxies adjusted for education only. These proxies are included to compare the 1 percent and the 20 percent Census sample; they are not serious options. As expected, the larger sample reduces fluctuations in the proxy for all area types, as measured by the standard deviation. This is illustrated by Kokomo, Indiana, whose proxy decreased from 1.73 (the highest) to 1.06, and Ocala, Florida, whose proxy increased from .54 (the lowest) to .79. The 20 percent proxy is a clear improvement.

Using the 20 percent sample increases mean proxy values in rural areas and somewhat lowers them in MSAs (especially those with 1-3 million population).

The reason for this is unclear; increases in sample size should lower the

Table II-4

Alternative Proxies for Physicians' Own Time Based on Professional Specialty Occupations: Means and Standard Deviations by Metropolitan Area Population

(1.00 = U.S. average)

	1% CENSUS SAMPLE			20% CENSUS SAMPLE		
	place of Residence		Place of Work		Place of Residence	Combined Occupation
	Education Adjustment Only (Interim Report)	Education Adjustment Only	Occupation Adjustment Only	Occupation and Education Adjustment	Occupation and Education Adjustment	and Education Adjustment, Baseline
MEANS						
Urban	1.06	1.05	1.05	1.04	1.04	1.04
3+ million	1.17	1.18	1.20	1.19	1.17	1.19
1-3 million	1.09	1.07	1.05	1.05	1.06	1.05
.5-1 million	1.01	66.	66.	66.	86.	86.
.255 million	66.	86.	86.	.97	86.	.97
<:25 million	.94	.94	.93	.94	.93	.93
Rural	. 81	. 8 5	. 85	98°	. 8 7	.87
STANDARD DEVIATIONS						
Urban	.15	.13	.12	.13	.12	.13
3+ million	.10	90.	80.		.07	80.
1-3 million	.12	.10	60.	.10	۲.	.10
.5-1 million	.12	10	.07	60.	60°	60°
.25-5 million	.12	.10	80.	60.	60.	80.
<. 25 million	.18	.12	60.	.10	.10	.10
Rural	.10	80.	90.	90.	90.	90°

These means and standard deviations are weighted by the 1980 population. The proxy from the interim report includes workers with at least 5 years of college. The other education-adjusted proxies include workers with at least 5 years of college.

variance of the mean estimator but do not affect the expected value of the mean estimator.²

The differences in both the means and standard deviations among the remaining four options shown are quite small. Most noteworthy is the value for the place-of-residence proxy in the largest MSAs. When the proxy is based solely on place-of-residence data, the largest MSAs have median earnings 17 percent above average—2 to 3 percent below the other technical options. This further documents that many high-income professionals working in large MSAs reside in other areas. The slightly higher value in rural areas for the place-of-residence proxy indicates that some higher-earning professionals that commute to MSAs live in rural areas. Despite these differences, the basic conclusion to be drawn from Table II—4 is that the four technical alternatives are similar at this level of area aggregation. Differences at the level of the individual area will be studied in a later chapter in the context of the overall GMEIs.

Policy Alternatives

In addition to the alternatives that are consistent with the theory in our interim report, a number of other options that may arise as part of the policy process are considered. We do not review the theoretical merits or deficiencies of these various options. Instead, we briefly discuss the context in which they may arise and compare them to the professional-earnings options

^{2.} The calculation of medians in large samples involves an algorithm that counts observations by intervals and interpolates within one interval. Estimates from the 20 percent and 1 percent samples may differ, because either the larger sample sizes enabled finer intervals to be used or the algorithm employed by the Bureau of the Census differed from the one used by the private contractor.

reviewed above. The means and standard deviations of these policy alternatives are presented in Table II-5.

Economic theory argues for a proxy based on the earnings of workers that have similar preferences to those of physicians. This led us to highly-educated professional workers as the basis for our index. While the earnings approach may be accepted, some may argue that there is no need to focus solely on professionals; that a broader set of geographic earnings differentials may be more politically desirable or less subject to random fluctuations in local labor markets.

Keeping the place of work sample, we derived two such proxies—one based on all workers (the broadest possible group) and one based on workers in nonmanufacturing industries. At this level of area aggregation, these proxies (the first two columns of Table II—5) appear to be within the range of the four technical options in Table II—4. This is somewhat surprising given the differences in the occupation base and the lack of any education or occupation adjustment. Both options are empirically comparable to the earlier options, or the area aggregations are masking differences. Further area—level analyses will be conducted on the overall GMEIs in chapter IV.

Whenever area income differentials are discussed, per capita income is likely to be a widely cited statistic. In our interim report we rejected it as a physician proxy, primarily because it can vary with demographic factors (e.g., family size), it includes nonlabor income, and it varies with occupation mix. Empirically, per capita income seems to overstate the difference between moderate to large MSAs and rural areas. Relative to any other option, using per capita income would produce the lowest index for rural areas.

Table II-5

Alternative Proxies for Physicians' Own Time Not Based on Professional Specialty Occupations: Means and Standard Deviations by Metropolitan Area Population

(1.00 = U.S. average)

		us Sample, of Work	HCFA		
	All Workers	Nonmanufact. Workers	Per Capita Income	Hospital Wage Index	Overhead Only
MEANS					
Urban	1.05	1.05	1.07	1.06	1.00
3+ million 1-3 million .5-1 million .255 million <.25 million	1.15 1.07 .99 1.00	1.18 1.07 .99 .97	1.17 1.14 1.02 .95 .91	1.19 1.09 .98 .98	1.00 1.00 1.00 1.00
Rural	.85	.85	.79	.82	1.00
STANDARD DEVIATIONS					
Urban	.11	.12	.16	.15	0
3+ million 1-3 million .5-1 million .255 million <.25 million	.06 .08 .09 .12 .13	.06 .08 .06 .09	.08 .14 .13 .13	.08 .15 .08 .11	0 0 0 0
Rural	.10	.09	.09	.08	0

These means and standard deviations are weighted by 1980 population.

We also included the HCFA Hospital Wage Index simply because Medicare already uses it to adjust payments by area. Unless there is strong reason to believe that physicians earnings and hospital wages vary in similar ways geographically, there are no conceptual grounds for this approach. Like per capita income, it seems to favor larger cities at the expense of rural areas, albeit less so.

The final policy alternative considered here applies no geographic adjustment to the physicians' own time component of the index. This amounts to paying physicians at the same <u>nominal</u> rate of compensation in all areas of the country, allowing <u>real</u> rates to vary inversely with the cost of living. The Physician Payment Review Commission (PPRC) has proposed a geographic adjuster for their RBRVS fee schedule that incorporates this approach. Since cost variation would only be allowed for overhead items such as malpractice insurance, office rents, and staff salaries, this index can be characterized as an "overhead only" GMEI. No data are shown for this option in Table II-5 because, computationally, each area is simply assigned a value of 1.0 for the physician proxy. However, the results of this alternative would be to compensate rural and small MSA physicians at a higher nominal rate than any other alternative, while reducing the rates paid in the larger MSAs.

III. COST SHARES AND OTHER PRICE PROXIES

Cost Shares

The weights in the GMEI are cost shares, the proportions of physician revenues spent on various practice inputs. We update these weights. Table III-1 reports practice cost shares of self-employed physicians for the years 1983, 1985, and 1987, calculated from the American Medical Association's Socioeconomic Characteristics of Medical Practice. The 1983 shares were used in the interim index.

Physician net income serves as the weight for the physicians' own time. It continues to account for over one-half of the GMEI, but its share is declining. From 1983 to 1987, the proportion of physician net income in gross practice revenues fell by 3.2 percentage points, from 57.4 to 54.2 percent. The only other GMEI category showing a significant decline is "other" (residual costs not allocated elsewhere). It fell by 1.1 percentage points, from 7.1 to 6.0 percent. The proportion of the GMEI not adjusted for geographic cost differences (medical supplies and equipment and the residual) fell from 14.2 percent in 1983 to 13.4 percent in 1987.

The share of malpractice insurance increased by 2.1 percentage points, more than any other category. Even so, in 1987 malpractice expenses accounted for only 5.6 percent of the GMEI, about one-tenth as much as physician time and one-third as much as employee wages. Employee wages, office rent, and medical supplies all increased their weight in the GMEI from 1983 to 1987. The rising employee share partially offsets the declining physician share, so that the total labor share (physicians plus employees) of the GMEI falls only from 71.9 percent in 1983 to 69.9 percent in 1987.

Table III-1
Input Cost Shares: 1983, 1985, 1987

	Net Income ^a	Non- Physician Employee Wages	Office Rent	Mal- Practice Insurance	Medical Supplies	Medical Equipment	Other
1983	57.4	14.5	10.4	3.5	4.6	2.5	7.1
1985	54.9	15.4	11.4	4.5	4.8	2.6	6.5
1987	54.2	15.7	11.1	5.6	5.0	2.4	6.0

Source: AMA (1984, 1986, 1988).

a. This serves as the weight for physicians' own time.

Besides the physicians' own time, we have proxies for three inputs: malpractice insurance, office rents, and employee wages. We have made improvements to each proxy.

Malpractice Insurance Premiums

Geographic variation in malpractice insurance costs is measured with the premium for a policy providing a constant level of coverage in each MSA or rural area of the state. Our interim report used the 1985 premium for a claims-made policy providing \$100,000/300,000 of coverage. Only state-to-state differences were accounted for. In states with multiple pricing areas, a state-level premium was calculated as a weighted average across sub-state areas, where the weights were the area's share of physicians in the relevant specialties.

Two basic refinements are now incorporated into this component. First, we used 1986 premium data, the most recent available data. These data allow us to capture current geographic patterns in malpractice costs. However, geographic differentials in 1986 differed considerably from those in 1985, suggesting that the index is sensitive to the year for which data were available. Since the index might be applied to payments in some future year, it did not seem appropriate to take either 1985 or 1986 differentials as indicative of future differentials. Therefore, we base the malpractice component of the GMEI on a simple average of 1985 and 1986 premiums in each area. Both years of data and the average are displayed in Table III-2 by state.

The second modification of this component is the explicit recognition of within-state variation in premiums. With data on sub-state rating areas, the state averages are adjusted to reflect pricing patterns actually faced by

Table III-2

1985 and 1986 Relative Malpractice Insurance Premiums for a \$100,000/\$300,000 Mature Claims-Made Policy, by State^a

	1985	1986	2-Year Average ^l
Alabama	0.72	0.94	0.83
Alaska	1.12	0.98	1.05
Arizona	1.21	1.33	1.27
Arkansas	0.27	0.34	0.31
California	1.65	1.12	1.38
Colorado	0.67	0.71	0.69
Connecticut	0.96	1.26	1.11
Delaware	0.55	0.79	0.67
District of Columbia	1.00	1.12	1.06
florida	1.35	1.27	1.31
Georgia	0.67	0.85	0.76
ławaii	1.07	1.00	1.04
Idaho	0.84	0.95	0.90
Illinois	1.34	1.58	1.46
Indiana	0.51	0.78	0.65
Iowa	0.51	0.78	0.63
Kansas	0.79	0.87	0.87
Kansas Kentucky	0.79	0.67	0.78
	0.87	1.03	0.87
Louisiana			
Maine	0.82	0.63	0.72
iaryland	0.78	1.04	0.91
Massachusetts	0.95	0.78	0.86
lichigan	1.25	1.54	1.40
linnesota	0.76	0.76	0.76
Mississippi	0.76	0.55	0.66
lissouri	0.71	1.49	1.10
iontana	0.74	0.72	0.73
lebraska	0.44	0.44	0.44
levada	0.95	1.36	1.16
New Hampshire	0.55	0.67	0.61
New Jersey	1.14	1.19	1.16
New Mexico	0.75	0.80	0.77
New York	2.11	1.40	1.76
North Carolina	0.40	0.36	0.38
North Dakota	0.68	0.71	0.70
Dhio	0.62	1.24	0.93
Oklahoma	0.46	0.58	0.52
Oregon	0.90	1.02	0.96
Pennsylvania	1.08	1.27	1.17
Rhode Island	0.71	0.78	0.74
South Carolina	0.52	0.38	0.45
South Dakota	0.75	0.64	0.69
Cennessee	0.35	0 - 47	0.41
Texas	0.47	0.46	0.47
Jtah	0.61	0.88	0.75
Jermont	0.44	0.64	0.54
Virginia	0.58	0.52	0.55
Vashington	0.96	1.19	1.08
West Virginia	0.49	0.90	0.70
visconsin	0.61	0.67	0.64
Wyoming	0.58	0.71	0.65

Source: HCFA Survey of Malpractice Insurers.

Note: Three individual premiums (general practitioners, general surgeons, and orthopedic surgeons) were added to form a Medicare "weighted" specialty. Each premium's weight was its share of Medicare physician spending accounted for by that specialty's risk class; 0.55 for general practitioners, 0.33 for general surgeons, and 0.12 for orthopedic surgeons.

a. For 1985 and 1986, premiums are reported as the ratio of the state's premium to the national average (weighted by the state's population). The 1985 national average was \$5750, while the 1986 average was \$9254.

b. The 2-year average is a simple average of the relative premium in each year.

physicians. For example, in Florida insurers charge one rate to physicians in the Miami and Fort Lauderdale MSAs and another rate to physicians in the rest of the state. The Miami-Fort Lauderdale rates are 28 percent above the state average, while rates in the rest of the state are 15 percent below.

Differences in malpractice prices for GMEI areas within Florida are reflected in the new index. Sub-state area adjustments are also necessary in the following states: Connecticut, Illinois, Indiana, Louisiana, Maryland, Michigan, Missouri, New York, Pennsylvania, Texas, and Virginia. In general, using sub-state rating areas increases premiums in major MSAs.

Other aspects of the methodology remain the same. We continue first to select data on premiums for general practitioners who do not do surgery (low-risk), general surgeons (moderate-risk), and orthopedic surgeons (high-risk), and then to create a "Medicare-weighted" specialty. The weights used to combine these premiums into a single, relative price are the share of Medicare spending accounted for by each risk class. For the low-risk group the weight is 0.55, the moderate-risk 0.33, and the high-risk 0.12.

Office Rents

As argued in our earlier report, data limitations necessitate basing this component of the index on housing rents as opposed to office rents. None of the available data on commercial office rents provide comprehensive geographic coverage and, in fact, may not be representative of the areas for which data are produced. However, a data series on apartment rental rates is produced by the U.S. Department of Housing and Urban Development and is published annually in the Federal Register. These "fair market" rent (FMR) data, which represent the 45th percentile of rents for various size apartments in each geographic market, are used in the computation of Section 8 rental subsidies.

The interim index used FMRs published in the 1986 Federal Register, representing rental patterns from 1985. The FMRs are based on the 1980 Census, post-1980 American Housing Surveys, and other area-specific data. They are updated annually by the Consumer Price Index (CPI) for metropolitan areas and regions. FMRs are stable from year-to-year. Therefore, we base the proxy on the most recent FMRs available at this time, 1987.

The "fair market" rent for the New York MSA is an anomaly. The 1987 FMR for New York is 20.1 percent above the national average, an implausibly low value for New York. (The 1985 FMRs were even lower.) New York is well below other MSAs with reputations of being high-rent areas. For example, the FMR for San Francisco is 75.5 percent above the national average and that of Boston is 57.8 percent above.³

In the judgment of HUD staff, the New York FMR was not unreasonably low for the purposes of computing assistance payments under the Section 8 program; that is, "housing of a modest nature" was available in the New York MSA at or below the FMR. 4 The New York MSA is unusual by virtue of being dominated by rent control. Apparently, New York City's rent-control program has kept rents well below those in the rest of its MSA or in several MSAs within its Consolidated MSA; for instance, the Nassau-Suffolk MSA is 56 percent above average. Applicable only to rents for housing, rent-control probably has not lowered rents for offices. Thus, the FMR is not as good a proxy for office

^{3.} These figures fall slightly when the proxy is renormalized following an imputation of the FMR in New York.

^{4.} In addition, no complaints were received from housing administrators in New York City. Complaints from Westchester County, part of the New York MSA, led to a separate 1987 FMR for Westchester 20 percent above New York City. HUD reported that this was the only such exception to the MSA-based FMRs in the nation.

rents in this MSA as elsewhere. Some alternative FMR value for the New York MSA might be a more realistic proxy for office rents.

Spatial economic theory suggests that rents should be highest in the central city of any metropolitan area, which is not the case for the FMRs in the New York CMSA. We propose assigning the highest FMR in the New York CMSA to the New York MSA. This probably still understates the true rental proxy but is a movement in the right direction. The highest FMR in the New York CMSA is in Bergen-Passaic, New Jersey, with a value 60 percent above the national average, which we use for the New York MSA. Given the 11 percent weight on the office rent component of the GMEI, this substitution raises the overall index by less than 5 percent in New York.

Nonphysician Employee Wages

The nonphysician employee wage proxy is an estimate of the relative wages by area of physicians' employees. The employee proxy has two components: (1) geographic wage indexes for four occupational categories employed by physicians and (2) employee expenditure shares by occupational category.

An employee proxy based on the 20 percent Census data will be more accurate than the interim proxy for several reasons. Most importantly, the larger sample size cuts sampling error. The wage index can be based on place of work rather than place of residence. It is no longer necessary to impute for areas which had zero or very small sample sizes for some occupations. With the larger sample, wage indexes for a more disaggregated employee occupational mix can be developed. Finally, the occupational expenditure share weights can be refined.

We first consider the development of geographic wage indexes from the 20 percent data and then the refinement of the occupation expenditure shares.

Geographic Wage Indexes

The employee proxy uses geographic wage indexes for four occupational groups:

- O Clerical (including secretaries, receptionists, bookkeepers, and office managers);
- o Registered nurses (RNs);
- o Licensed practical nurses (LPNs); and
- o Health technicians.

The interim report combined the last two categories and used hourly earnings from the occupational group "health technologists and technicians" as an overall proxy. With the 20 percent data, we defined separate proxies for these two groups.

The two nursing categories of physicians' employees—RNs and LPNs—match directly Census occupational classifications. Sample sizes appear adequate to measure area wages, except perhaps for the smallest place—of—work samples. The median place—of—work RN sample size is 119 and the median LPN sample is 40. However, the smallest RN sample size is only about 10 and the smallest LPN sample size is only 3. These sample sizes are small enough to raise concern about random error in estimating area wages. For greater accuracy in less populous GMEI areas, the place—of—residence data can be used. Minimum sample sizes are about three times as large in the place—of—residence data, 27 for RNs and 9 for LPNs. (Median residence samples are about twice as large, 271 for RNs and 90 for LPNs.)

As with professional earnings, place-of-work and place-of-residence employee earnings differ almost exclusively in Consolidated MSAs. Since place-of-residence data yields more precision (especially in the least populous areas) a "combined" place-of-residence/place-of-work proxy is technically

preferred for employee wages as well as for professional earnings. This proxy uses place-of-work data to account for commuting in Consolidated MSAs and place-of-residence data elsewhere to achieve greater precision.

Percentiles of the "combined" place-of-work/place-of-residence wage indexes are shown in Table III-3. Urban-rural and MSA-size means are given in Table III-4.

We use median hourly earnings of "health technologists and technicians excluding LPNs" for health technicians. The smallest place-of-work sample is five. Using the place-of-residence data increases the smallest sample size to 17 and the median sample from 50 to 112. The "combined" place-of-work/place-of-residence proxy is preferred because of the larger sample sizes.

The "clerical" occupations comprise a majority of the employee proxy. We used hourly earnings of administrative support personnel, including clerical, to measure the wages of this group. Sample size is not a problem—the smallest place—of—work sample is 266.

Occupational Expenditure Shares

We also refined the occupational expenditure shares with the 20 percent Census data. The interim GMEI shares were derived from counts of employees by occupational category from the 1984 HCFA-NORC Physicians' Practice Costs and Income Survey (PPCIS) and were adjusted by annual earnings for full-time, year-round workers (published 1980 Census of Population and Housing).

Table III-3

Employee Wages (Normalized): Percentiles and Standard Deviations*

(1.00 = U.S. average)

	Registered Nurses	Licensed Practical Nurses	Health Technicians Excluding LPNs	Administrative Support Personnel
Percentiles				
Maximum	1.39	1.49	1.62	1.45
90th	1.06	1.14	1.10	1.07
75th	0.99	1.06	1.02	0.99
50th	0.95	0.92	0.97	0.93
25th	0.92	0.85	0.89	0.88
10th	0.90	0.79	0.84	0.85
Minimum	0.83	0.62	0.71	0.78
Standard Deviation	0.11	0.15	0.12	0.12

^{*}Combined place-of-work/place-of-residence data. Both the percentiles and standard deviations are weighted by 1980 population.

Table III-4
Employee Wages (Normalized) by
Metropolitan Area Population*

(1.00 = U.S. average)

Metropolitan Area Population	Registered Nurses	Licensed Practical Nurses	Health Technicians Excluding LPNs	Administrative Support Personnel
Urban	1.03	1.05	1.03	1.04
3+ million	1.14	1.20	1.13	1.18
1-3 million	1.04	1.06	1.06	1.05
.5-1 million	0.96	0.99	0.97	0.98
.255 million	0.98	0.98	0.99	0.97
< .25 million	0.95	0.91	0.94	0.92
Rural	0.91	0.85	0.89	0.88

^{*}Combined place-of-work/place-of-residence data. Means are weighted by 1980 population.

Table III-5
Occupational Expenditure Shares for the Employee Proxy

Occupational Group	Interim	Revised
Administrative Support Personnel, Including Clerical	63.7%	60.4%
Registered Nurses	19.4	20.4
Licensed Practical Nurses	6.1	6.9
Health Technicians, Excluding LPNs	10.7	12.3

Source: 1984 HCFA-NORC Physician Practice Costs and Income Survey.

With the 20 percent sample, we used hourly earnings data to more accurately adjust the PPCIS counts of employees for relative earnings levels, 5 under the assumption of equal average hours worked by workers in each employee occupational category. 6 The new shares and the interim shares are shown in Table III-5. The share of administrative support personnel is slightly lower than before, while the shares of the other occupations (registered nurses, health technicians, and licensed practical nurses) are slightly larger. The GMEI employee proxy is the sum of the wages (normalized) of the occupational groups, weighted by the revised expenditure shares. Percentiles and urbanrural means of the employee proxy are presented in Chapter IV.

Appendix B lists each price proxy for each MSA and rural area of the state, and Appendix C lists them for each locality.

^{5.} For example, the published 1980 Census data for full-time, year-round workers did not break out the occupational category "health technicians, excluding LPNs" separately, leading to some bias in measuring the annual earnings of this group.

^{6.} If average hours worked in physicians' offices differs among the occupational groups, then the share of physicians' payrolls spent on the various occupations would not be proportional to the product of numbers of employees and their hourly earnings, but would also need to be adjusted for differences in hours worked. For example, if RNs in physicians' offices worked more on average than LPNs, using hourly earnings to adjust counts of employees for earnings differences would lead to an overstated LPN share of employee expenditures relative to the RN share.

IV. GMEI ALTERNATIVES

This chapter presents nine GMEI alternatives. Given the large weight on the physicians' own time component and the number of options in this area, all the alternatives we consider differ only in their treatment of physicians' own time. 7

For exposition and statistical analysis, it is useful to have a common baseline against which the various alternatives can be compared. The baseline used here is the physician proxy based on the "combined" place-of-work and place-of-residence data. This proxy incorporates both the education and occupation adjustments. For consistency, the employee wage proxy also uses "combined" data. In alternatives using only place-of-work data for the physician proxy, such data are also used for the employee proxy.

Baseline GMEI

Table IV-1 presents descriptive statistics for the baseline GMEI and its components. Selected percentiles and standard deviations, both weighted by area population, are shown. All proxies have been normalized relative to a population-weighted national average, as required by the index structure employed in the GMEI.

The major change relative to the interim index occurs in the physicians' own time proxy. The interim proxy ranged from a minimum of 0.54 to a maximum of 1.73 (see Table VI-1 in the interim report). Both of these values were for small MSAs and, in all likelihood, were caused by sampling variation. The

^{7.} Our interim report indicated that the data source chosen to compute the cost shares (i.e., weights) made little difference. In addition, the application of specialty-specific cost shares did not result in substantially different specialty-specific GMEIs. Finally, credible options do not appear to exist for employee wages, office rents, and malpractice insurance.

Table IV-1

Input Price Proxies: Percentiles and Standard Deviations (1.00 = U.S. average)

	Physicians' Own Time, Baseline	Employee Wages, Baseline	Office Rent	Malpractice Insurance	GMEI, Baseline
Percentiles			-		
Maximum	1.49	1.45	1.73	2.13	1.35
90th	1.24	1.19	1.51	1.75	1.22
75th	1.11	1.07	1.17	1.26	1.10
50th	.97	.98	.92	.93	.97
25th	.89	.91	.78	.67	.89
10th	.84	.86	.69	.51	.84
Minimum	.72	.81	.58	.30	.76
Standard					
Deviation	.14	.12	.29	.43	.14

Both the percentiles and standard deviations are weighted by 1980 population.

baseline physician proxy has a much smaller range; the minimum is 0.72 and the maximum is 1.49. More than just the extremes are being pulled in; the larger sample (as well as the other adjustments) also reduces the range between the 10th and 90th percentiles. This tightening of the physician proxy distribution reduces the dispersion of the baseline GMEI.

Except for the physicians' own time, the dispersion in the price proxies is similar to that of the interim GMEI. The dispersion in employee wages drops slightly and the minimum value increases from .73 to .81. We again observe the greatest variation to be in malpractice premiums, exhibiting a seven-fold difference from the high- to low-cost area. The major change in the second most variable proxy—office rents—is captured by the 90th percentile. This value is 12 percentage points higher than in the interim report. This change is due, in part, to the adjustment made to the fair market rent in the New York MSA.

Means of the new proxies and the baseline GMEI differ relative to the interim index by area type, as displayed in Table IV-2. The baseline index is 17 percentage points higher in urban than in rural areas, as compared to 21 percentage points for the interim GMEI (see Table VI-2 in the interim report). This reduction is largely due to the fact that the urban/rural difference in the physician proxy falls from 25 in the interim report to 17 percentage points. In the baseline GMEI, the urban/rural differential for the physician proxy is similar to that for the employee proxy; it was substantially larger in the interim index.

The major changes in the two nonlabor proxies occur in the largest MSAs.

Due to the adjustment in rent for New York MSA, the office rent proxy increased

14 percentage points there. Due to the recognition of intrastate variation in

Table IV-2

Input Price Proxies and GMEI Means by Metropolitan Area Population

(1.00 = U.S. average)

Metropolitan Area Population	Physicians' Own Time, Baseline	Employee Wages, Baseline	Office Rent	Mal- practice Insurance	GMEI, Baseline
Urban	1.04	1.04	1.08	1.08	1.04
3+ million	1.19	1.16	1.34	1.55	1.20
1-3 million	1.05	1.05	1.11	1.10	1.05
.5-1 million	.98	.98	.98	.82	.97
.255 million	.97	.97	.95	.91	.97
< .25 million	.93	.93	.88	.79	.93
Rural	.87	.88	.73	.75	.87

Note: These means are weighted by 1980 population.

malpractice premiums, the malpractice proxy increased by 9 percentage points in the largest MSAs. The new approach to malpractice also raises the proxy value in MSAs with between 1 and 3 million population. Offsetting these relative increases are, necessarily, relative reductions in the other types of areas.

Analysis of Alternatives

Having selected a baseline index, we now compare each of the remaining eight alternatives to this index. (Appendix B lists each alternative index by MSA and rural area of state.) This sensitivity analysis involves average differences and the distribution of these differences across areas. We define an area as having a gain under an alternative if its index increases by more than 5 percentage points over the baseline. If an area has a decrease of more than 5 percentage points, we term that a loss. GMEI changes of less than 5 percentage points are treated as no change.

For each alternative, Table IV-3 shows the national distribution of areas across the gain/same/loss categories. The table also shows the average absolute change in the index (in terms of percentage points), that is, the difference between the alternative and the baseline, on average. All of the technical alternatives are closer to the baseline than any of the policy alternatives. The baseline index used both place-of-work and place-of-residence earnings data, adjusted for both occupation and education. By construction the first option is most similar to the baseline: It has both adjustments but uses place-of-work data in all areas, not just in CMSAs.

^{8.} The population-weighted correlation between any pair of indices is always above .9. A weakness of correlation as a measure of similarity is that a pair of indices may be highly correlated but have very different values. Then in a simple regression, the slope coefficient could be quite different from one.

Table IV-3
Comparison of Alternatives to Baseline GMEI

	Distri	bution of	Areas ^a	Average Absolute
	Gain	Same	Loss	Differenceb
Technical Alternatives ^C			•	
Occup. & Educ. Adjustment	7	355	4	0.5%
Occupation Adjustment Only	1	359	6	1.3
Education Adjustment Only	19	340	7	1.6
Policy Alternatives				
Nonmanufacturing Workers	38	293	35	2.9%
<code>HCFA</code> Hospital Wage Index $^{ m d}$	60	247	54	3.7
All Workers	65	263	38	3.4
Per Capita Income ^e	80	195	87	5.3
Overhead Only	140	182	44	6.3

a. Areas are categorized on the basis of the difference between each alternative and the baseline GMEI. When the alternative is 5 percentage points greater (less) than the baseline, the area is defined to have a gain (loss). Otherwise, the alternative is treated the same as the baseline.

c. All of these use only place-of-work data.

b. For each alternative, the absolute value of the difference between it and the baseline was averaged across areas using area population as the weight.

d. Five areas have missing values.

e. Four areas have missing values.

Predictably, this option has the smallest percent change, showing that place-of-work and place-of-residence data outside of CMSAs are quite similar. The added complexity of using "combined" data makes little difference in the index values.

The next two technical options both use only place-of-work data; the second option uses only the occupation adjustment, and the third option uses only the education adjustment. Though small, the average changes associated with removing the education adjustment (to improve sample size) or dropping the occupation adjustment are approximately three times greater than using only place-of-work data with both adjustments. However, removing the education adjustment results in fewer gainers or losers (7 areas) than using only place-of-work data (11 areas). More areas gain or lose when the occupation adjustment is dropped (26 areas); however, this is still a small share of the overall distribution. The three professional earnings options are numerically so similar to the baseline that one must rely on conceptual arguments to choose among them.

In contrast, the five policy alternatives are not as similar to the baseline. The policy option closest to the baseline is based on earnings of nonmanufacturing workers. However, under this alternative almost 20 percent of the areas gain or lose in excess of 5 percentage points. The least similar policy options use per capita income or do not adjust for variation in the physician component. These options are an average of 5.3 and 6.3 percentage points, respectively, from the baseline. Per capita income results in losses in 24 percent of the areas and gains in 22 percent. Not adjusting for physician time costs causes the index value to go up by more than 5 percent in 38 percent of the areas and down in 12 percent. This analysis suggests that

policymakers need to be concerned about <u>both</u> the empirical impact and the weak conceptual foundation for these five options.

We expected each of the technical alternatives to be more similar to the baseline than any of the policy indices; the technical options, after all, merely involve modifications of Census data on professional earnings.

Conceptually, the policy alternatives can be thought of along a continuum relative to the baseline. The first three policy alternatives are somewhat similar to the baseline index by virtue of using earnings data. Of these three alternatives, an index based on the earnings of nonmanufacturing workers should be, and is, closer to the baseline than one based on the earnings of all workers. Per capita income includes earnings, so an index based on per capita income should be, and is, more similar to earnings—based indices than an overhead—only index, which is unrelated to any component of physician earnings.

This national-level analysis may mask how these alternatives differ from the baseline by area type. Therefore, we derived the average percent difference from the baseline (Table IV-4) and the distribution of gainers and losers for each alternative by area type (Table IV-5). Unlike above, we did not take the absolute value of the percent change so that categories of areas that gain or lose could be detected.

For all of the technical alternatives, the index is lower in rural areas and higher in urban areas than under the baseline. Rural areas lose the most (1.1 percent) when the occupation-mix adjustment is dropped, showing that rural areas have a disproportionate share of low-earning professionals. Overall, like the national-level analysis, these results document fairly small differences for all area types among these alternatives. Of the three alternatives, dropping the occupation adjustment makes the largest difference.

Table IV-4

Average Percent Difference between Alternatives and Baseline GMEI by Metropolitan Area Population

	Techn	Technical Alternatives	ives		Policy	Policy Alternatives	ves	
7	Occupation & Education Adjustment	Occupation Adjustment Only	Education Adjustment Only	Normanuf. Workers	HCFA Hospital Wage Index	Alļ Workers	Per Capita Income	Overhead Only
Urban	0.2	0.2	0.4	0.3	0.7	0.3	1.4	-2.3
3+ mil.	0.2	0.4	-0.5	9*0-	0.2	-1.9	-1.2	-10.2
1-3 miI.	0.1	0.1	0.7	1.1	2.1	0.7	4.6	-2.9
.5-1 mil.	0.3	0.3	9.0	0.3	-0.2	0.7	2.2	1.0
.255 mil.	-0.2	0.3	0.4	0.1	0.5	1.7	6.0-	1.6
< .25 mil.	0.4	0.1	0.5	-0.2	-0.3	~. -	4	3.7
Rural	-0.5	8.0-	-1.1	8.0-	-2.3	-1.0	-4.4	7.3

The means are weighted by 1980 population.

Table IV-5

Comparison of Alternatives to Baseline GMEI, by Metropolitan Area Population $^{\mathrm{a}}$

	Occub.	Occup. & Educ. Adiust.	Adjust.	Occupa	Occupation Adjust.Only	ust.only	Educat	Education Adjust.Only	st.only	Nonma	Nonmanufac. Workers	orkers
	Gain	Same	Lose	Gain	Same	Lose	Gain	Same	Lose	Gain	Same	Lose
Urban	7	307	ю	-	310	9	18	293	9	33	252	32
3+ mi1.	0	7	0	0	7	0	0	7	0	0	9	1
1-3 mi1.	0	3.5	0	0	3.4	1	0	3.5	0	7	56	2
.5-1 mil.	0	44	0	0	4 2	2	-	43	0	m	37	4
.255 mil.	0	67	~	0	8 9	0	2	64	2	9	58	4
< .25 mil.	7	154	7	Ħ	159	m	15	144	4	17	125	21
Rural	0	48	1	0	4.9	0	н	47	1	S	41	m

	HCFA	HCFA Wage Index	ndex	K	All Workers	rs	Per	Per Capita Income	ncome	0 0	Overhead-only	nly
	Gain	Same	Lose	Gain	Same	Lose	Gain	Same	Lose	Gain	Ѕаше	Lose
Urban	57	210	4 6	09	226	31	7.5	171	29	105	169	43
3+ mil.	0	5	2	0	9		2	4	н	0	2	'n
1-3 mil.	æ	23	4	9	26	m	1.7	16	2	4	19	12
.5-1 mil.	7	3.0	7	īΩ	3.4	ĸ	11	3.0	m	6	28	7
.255 mil.	11	51	9	17	46	īŪ	10	44	14	16	44	ဆ
< .25 mil.,	31	101	27	32	114	17	35	77	47	91	91	11
Rural	ж	3.7	80	ſΩ	37		ĸ	24	2.0	35	13	1

See notes at end of Table IV-3.

Small MSAs (less than 250,000 population) are over-represented among gainers and losers (Table IV-5). This is consistent with their small sample sizes, producing random fluctuations under any option. This also suggests that "anomalies" are most likely to occur in small MSAs.9

Among the policy alternatives, the broad-based earnings options are more like the baseline than the others, but, they are not as close to the baseline as the technical alternatives. The all-workers proxy produces about twice as many gainers as losers among urban areas. The ratio of gainers to losers is highest for cities of 500,000 population or less. The GMEI using the HCFA Wage Index produces a distribution of gainers and losers similar to the broad-based earnings options. However, the average changes indicate that the extent of losing among rural areas and gaining among MSAs (particularly those between 1 and 3 million) is greater for the HCFA wage option.

The analysis by area type provides important information about the per capita income and overhead-only options—the indices least similar to the baseline GMEI. Though the share of areas gaining and losing under the per capita income option is about equal nationally, the losers are predominantly rural and the winners moderate—to—large MSAs. On average, a per capita income GMEI is 4.4 percentage points below the baseline for rural areas.

On the other hand, an overhead-only GMEI produces a large number of gainers in rural areas and losers among the large MSAs. Rural areas increase by 7.2 percentage points relative to the baseline, with gainers outnumbering losers by 35 to 1. This approach also results in an increase in MSAs with fewer than 1 million population. However, these increases in small cities do not outweigh the reductions in the two largest categories of MSAs shown. The

^{9.} However, some of these differences could be reduced when locality-level indices are derived from this original set of MSA statistics.

seven most populous MSAs experience a 10 percent reduction in their index relative to the baseline; the index in five of these areas fall by more than 5 percentage points. MSAs with 1-3 million population also have lower indices.

V. UPDATING THE CENSUS-BASED PRICE PROXIES

Proxies for physicians' own time and employee wages based on the 1980 Census may not reflect current geographic cost differences. 10 Although cost differences could be fairly stable over time, it would be desirable to have the proxies capture geographic patterns that are as current as possible. Because the 1980 Census is the only data source that allows for the required degree of geographic disaggregation, it must be our source for the detailed earnings structure across areas. However, if one assumes that earnings grew at the same rate within groups of GMEI areas one can develop update factors from a data source that has less geographic differentiation than the Census.

The choice of the proxy for physicians' own time and the choice of the update factor (if any) can and should be kept separate. The attractiveness of an update factor is not affected by the choice of the technical options of physicians' own time proxy.

Consumer Price Index (CPI) for Both Proxies

One data source for updating is the Consumer Price Index (CPI). The logic behind this approach is that earnings differentials largely capture differences in cost of living, so that a cost-of-living index could be used to update earnings figures. The Bureau of Labor Statistics publishes its CPI for all Urban Consumers (CPI-U) by Census region by MSA size. There are four regions and four MSA size categories, yielding 16 cells. Two minor technical problems are present. First, the population levels distinguishing these categories differ across regions in 1989, whereas they were the same in 1979. We were informed that these thresholds were chosen to minimize the switching of MSAs

^{10.} Of the other two proxies, fair market rents are updated annually by HUD and malpractice proxy is based on the most current data.

from one size category to another following the 1980 Census and to maximize usefulness of the sample. We use the 1989 size definitions. Second, three out of 16 cells were dropped by 1989. For these cells, we use the national values for the size category in both 1979 and 1989.

Table V-1 presents the CPIs in December 1979 and January 1989 and the conversion factor. The 1979 and 1989 values have different base years.

Multiplying the 1979 value by the conversion factor results in a common base year. The percent change is calculated as the ratio of the 1989 and 1979 CPIs minus one. For comparison purposes only, the final column of Table V-1 shows change relative to the national change of 57.1 percent. Using the CPI to update earnings would increase the proxy for all MSAs in the Northeast and large MSAs in the West. Rural areas would face a lower proxy, as would small MSAs outside of the Northeast. However, the maximum impact would be less than the impact of the Current Population Survey (CPS, see below). Relative changes are between plus 5 percent and minus 5 percent.

The CPI is published by BLS on a timely basis. Were the CPI used as the update factor, there would be minimal lag. The CPI is widely used and accepted as a means of updating wages and payments (e.g., in "escalator clauses" in collective bargaining agreements and for increasing social security payments). A disadvantage of this approach is that it combines different types of data (an earnings proxy with a cost-of-living update). Changes in prices do not always

^{11.} The terms here are confusing. The Census Bureau distinguishes between metropolitan areas (MSAs) and nonmetropolitan areas (everywhere else). It also distinguishes between urban areas (places of 2,500 or more inhabitants) and rural areas (everywhere else). Whereas BLS follows the Census Bureau's definitions, HCFA, for the purposes of PPS, does not. "Rural areas," as used by HCFA, is synonymous with "nonmetropolitan areas," as used by the Census Bureau. Hence, the CPI for "nonmetropolitan areas" can appropriately be applied to earnings in "rural areas," as used in this report.

Table V-1

Consumer Price Indices by
Metropolitan Area Size and Region

(19	1979	Value 1989 (1983=100)	Conversion Factor	Percent Change	Relative Change
Northeast More than 1,200,000 500,000 to 1,200,000 50,000 to 500,000 Nonmetropolitan*	119.0	126.1	0.647	63.8%	4.3%
	122.2	123.1	0.622	62.0%	3.1%
	125.7	124.4	0.602	64.4%	4.6%
	122.9	117.5	0.620	54.2%	-1.8%
North Central More than 1,200,000 360,000 to 1,200,000 50,000 to 360,000 Nonmetropolitan	126.3	119.8	0.606	56.5%	-0.4%
	124.6	118.3	0.619	53.4%	-2.4%
	123.7	118.8	0.628	52.9%	-2.7%
	123.0	114.5	0.624	49.2%	-5.0%
South More than 1,200,000 450,000 to 1,200,000 50,000 to 450,000 Nonmetropolitan	123.1	119.7	0.619	57.1%	-0.0%
	124.6	119.9	0.613	57.0%	-0.1%
	124.3	117.8	0.618	53.4%	-2.4%
	122.5	116.9	0.616	54.9%	-1.4%
West More than 1,200,000 330,000 to 1,200,000* 50,000 to 330,000 Nonmetropolitan*	124.8	123.3	0.613	61.2%	2.6%
	124.6	120.1	0.616	56.5%	-0.4%
	124.5	119.8	0.645	49.2%	-5.0%
	122.9	117.5	0.620	54.2%	-1.8%

Sources: BLS (1980, 1988, 1989).

Note: The threshold between the second and third cells differs by region. In 1979 it was constant across regions.

*Because values for these cells are not reported after 1988, national values for the size categories were used in both 1979 and 1989. The 1979 value is converted into the 1983 base year by multiplying it by the conversion factor. measure changes in wages accurately. Moreover, different rates of wage change within the CPI cells are not measured. In all, the CPI is a plausible update factor.

Current Population Survey (CPS) for Both Proxies

A second data source for developing update factors is the Current Population Survey (CPS). In March of each year, CPS collects data on earnings in the previous year. Its questionnaire structure is sufficiently similar to the Census' that the data are comparable. In particular, the CPS allows us to measure median hourly earnings for urban and rural areas within census divisions for several broad occupational groups. We focus on professional specialty occupations (to update the physician proxy) and all workers (to update the employee proxy).

The approach here uses CPS to measure the rate of change in median hourly earnings since 1980 and the most recent year possible for urban and rural areas by census divisions. Then we would multiply the Census-based median earnings (chapters II and III) by the rate of change corresponding to its community type and location. The price proxies would be based on these updated median earnings. To the extent that earnings growth varies across MSAs or rural areas within Census divisions, this approach yields misleading results. However, using CPS to update Census data is plausible given the comparability of the surveys and the desire to use available sources.

Computing the CPS Update Factors.

The update factors (U) are computed as:

$$U_{ijk} = \frac{\text{update year } M_{ijk}}{\text{base year } M_{ijk}}$$

where M_{ijk} represents median hourly earnings in community type i (urban or rural), census division j and occupational group k (professionals or all workers). The base year is 1979, because that is the year for which earnings data are reported in the 1980 Census. The update year would be the most recent year for which CPS data are available. These update factors are computed separately for professionals and all workers.

In order to lessen imprecision in each M_{ijk} due to the small sample sizes in CPS as compared to Census, we base each median on a three-year average of CPS data. That is, the base year is the average of the 1978, 1979 and 1980 medians. Because 1986 is the latest year for which we have data, the most recent update year we would be able to use is 1985. The median for 1985 is the average of 1984, 1985, and 1986 medians. For each of the CPS years, the M_{ijk} are computed as weighted median hourly earnings (where the weights are the CPS sampling weights for each observation). The three-year averages of weighted median hourly earnings are presented in Table V-2.

The update factors U_{ijk} derived from this process are displayed in Table V-3. Median hourly earnings would be multiplied by the appropriate update factor to yield a set of updated medians. These updated medians would be used to compute the actual updated price proxies, where each area's wage is normalized relative to the national median hourly earnings. The national median is computed as a weighted average of all GMEI area medians, where population is used as the weight.

Validating the CPS Update Factors.

Before using the CPS update factors, it would be desirable to investigate their validity by comparing them to an independent set of earnings data. A reasonable data source for these purposes is available from the Bureau of

Table V-2
Weighted Median Hourly Earnings
(3-year averages)

		Profess	sionals		All-Workers			
Conque Division	19		1985		197		198	
Census Division	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
United States	\$7.73	\$6.28	\$11.68	\$9.31	\$5.39	\$4.25	\$7.65	\$5.81
New England	7.65	6.81	12.00	9.76	5.35	4.72	8.07	6.68
Mid-Atlantic	7.94	7.19	12.07	10.47	5.57	5.06	8.13	6.44
South Atlantic	7.28	6.07	11.39	9.38	4.94	4.09	7.19	5.87
East North Central	7.93	6.40	11.38	9.51	5.74	4.64	7.66	6.11
East South Central	6.73	6.11	10.02	8.83	4.85	3.94	6.30	5.42
West North Central	7.16	5.82	10.66	8.94	5.30	3.83	7.40	5.16
West South Central	7.15	5.82	10.82	8.58	4.95	3.73	7.08	5.25
Mountain	7.65	6.61	11.55	9.07	5.36	4.40	7.34	5.95
Pacific	8.58	.7.16	13.03	10.67	5.70	4.90	8.27	6.81

Sources: 1978, 1979, 1980, 1984, 1985, and 1986 Current Population Surveys (CPS).

Table V-3

Update Factors for the Census-Based Price Proxies

	Profes	sionals	All-Wo	orkers
Census Division	Urban	Rural	Urban	Rural
United States	1.51	1.48	1.42	1.37
New England	1.57	1.43	1.51	1.42
Mid-Atlantic	1.52	1.46	1.46	1.27
South Atlantic	1.56	1.55	1.46	1.43
East North Central	1.44	1.49	1.34	1.32
East South Central	1.49	1.44	1.30	1.38
West North Central	1.49	1.53	1.40	1.34
West South Central	1.51	1.47	1.43	1.41
Mountain	1.51	1.37	1.37	1.35
Pacific	1.52	1.49	1.45	1.39

These update factors are ratios of 1985 weighted median earnings to 1979 weighted median earnings in Table V-2.

The U.S: figures are not used as update factors.

Economic Analysis of the Commerce Department (BEA). This source, which provides data on total wages and salaries and total workers, is largely derived from unemployment insurance records (as reported to the Bureau of Labor Statistics through the ES-202 data system). The major strength of these data is that they are not derived from a small sample of workers. The major weaknesses for our purposes are that they do not distinguish among occupations or between full- and part-time workers. This latter flaw was a central reason for replacing the BLS ES-202 data in the PPS Hospital Wage Index.

The BEA data can be used to validate the update factors by comparing the U_{ijk} based on median hourly earnings (from CPS) to a set of U_{ij} based on average annual earnings. We obtained average annual earnings in urban and rural areas by census division for 1979 and 1986. These averages and the associated update factors are presented in Table V-4. The simple correlation between the BEA update factors and the CPS update factors for all workers is 0.75, suggesting that the CPS are reflecting broad-based changes in earnings and not simply stochastic fluctuation due to small sample size.

A more detailed way to compare the CPS and BEA update factors is to determine how each would affect the relative position of the price proxy in community type i and census division j. To do this, we start by computing a national average of CPS update factors as

$$U_{k}^{*} = \frac{\sum U_{ijk} P_{ij}}{\sum P_{ij}}$$

where P is a population size weight. Because a national average is available from BEA, that average serves a U*. Then, for each data source and occupation group (in the case of CPS), we determine the relative percent change in the

Table V-4
Average Annual Earnings, All Workers

Census Division	1979		1985		Ratio*	
	Urban	Rural	Urban	Rural	Urban	Rural
United States	\$13,323	\$10,559	\$20,382	\$15,376	1.53	1.46
New England	12,453	10,280	20,482	15,987	1.64	1.56
Mid-Atlantic	13,807	11,153	21,803	16,256	1.58	1.46
South Atlantic	12,256	9,832	19,018	14,917	1.55	1.52
East North Central	14,446	11,305	20,874	16,128	1.44	1.43
East South Central	11,880	10,008	17,817	14,743	1.50	1.47
West North Central	12,976	9,858	19,482	13,987	1.50	1.42
West South Central	12,889	10,312	19,586	15,126	1.52	1.47
Mountain	12,686	11,477	19,264	16,159	1.52	1.41
Pacific	13,771	12,388	21,435	17,249	1.56	1.39

Source: Special tabulations of the Bureau of Economic Analysis (BEA).

^{*}This is the ratio of 1986 to 1979 Average Annual Earnings within community type and census division.

proxy that would occur as a result of updating as

$$R_{k} = [U_{ijk}/U_{k}^{*}] - 1$$

For the CPS professional sample, U_k^{\star} is equal to 1.505; for the CPS all workers, U_k^{\star} is equal to 1.409; and for the BEA, U_k^{\star} is equal to 1.524. The relative percent changes are presented in Table V-5. A positive number indicates the update factor increases the price proxy in that cell relative to the nation as a whole; a negative figure indicates the opposite.

In general, the relative changes attributable to CPS updating are reflected in the BEA data. The update factor that utilized the earnings of professionals has the largest impact in the rural Mountain division, which drops by 8.7 percent. Otherwise the relative impacts are less than 5.0 percent. The all-workers update factor has its largest impact in rural Mid-Atlantic, which drops by 9.6 percent. BEA partially confirms this, showing a drop of 4.3 percent. The next two largest changes are urban East South Central, which drops by 4.8 percent in CPS all-workers factor and by 1.6 percent in BEA data, and urban New England, which increases by 7.0 percent in CPS all-workers factor and by 8.0 percent in BEA data.

The CPS-based update factors presented here seem to provide a reasonable method for making the 1980 Census price proxies more current. Averaging over three years appears to lower fluctuation. In addition, since the relative changes are now corroborated by the BEA data, this method could be used to update the Census proxies.

Table V-5

Relative Impact of Update Factors on Census-Based Price Proxies

	CPS				ВЕ	BEA	
Census Division	Profes: Urban	sionals Rural	All Wo	orkers Rural	All W Urban	Norkers Rural	
United States	0.4%	-1.5%	0.8%	-2.9%	0.4%	-4.4%	
New England	4.3	-4.7	7.0	0.5	8.0	2.1	
Mid-Atlantic	1.1	-3.2	3.7	-9.6	3.7	-4.3	
South Atlantic	4.0	2.7	3.3	1.7	1.9	-0.4	
East North Central	-4.6	-1.2	-5.2	-6.5	-5.2	-6.4	
East South Central	-1.1	-4.0	-7.8	-2.3	-1.6	-3.3	
West North Central	-1.0	1.5	-0.9	-5.1	-1.5	-6.9	
West South Central	0.6	-2.1	1.5	0.0	-0.3	-3.7	
Mountain	0.4	-8.7	-2.9	-3.9	-0.3	-7. 6	
Pacific	0.9	-0.9	2.9	-1.4	2.2	-8.6	

See text for calculation.

Area Wage Survey for Employee Wages

The BLS Area Wage Survey measures MSA-level hourly earnings by occupational group based on annual surveys. For updating, the Area Wage Survey data has two important advantages:

- (1) Update factors can be calculated for about 60 specific metropolitan areas. To the extent that wage inflation varies among MSAs within regions, these update factors are more accurate than the regional averages. The 60 areas include the most populous MSAs in the nation, which account for 47 percent of the U.S. population.
- (2) Wage inflation is measured for five occupational groups, two of which (office clerical and registered industrial nurses)¹² match rather well with occupational categories of the employee proxy (administrative support personnel and nurses). To the extent that the wage increases of physicians' employees are more similar to the wage increases of these occupations than to increases for all workers, or to increases in consumer prices, update factors derived from the Area Wage Surveys are more accurate than the alternatives.

The Area Wage Survey data, however, has some significant disadvantages:

- (1) Few small metropolitan areas and no rural areas are surveyed. Thus, update factors have to be imputed for about 300 areas and may not be accurate. The BLS does present regional update factors (Northeast, South, Midwest, West), which could aid in imputation.
- (2) Because of small sample sizes, stochastic error may be significant for middle-sized MSAs. This is more of an issue for industrial nurses than for office-clerical, because of smaller sample sizes for nurses. However, BLS

^{12.} A registered industrial nurse is a registered nurse employed by a manufacturing firm, department store, etc.

publishes only wage inflation factors that meet its criteria for accuracy, so all of the published values should be reasonably accurate.

- (3) BLS does not survey establishments with fewer than 50 employees, so the Area Wage Survey data disproportionately reflect wages in larger, more unionized firms.
- (4) There is a fairly long lag in updating. In spring 1989, the most recent available data pertained to the end of 1985.
- (5) Imputing values for missing areas is a complex task. This greater complexity must be weighed against any gains in accuracy attainable through use of the Area Wage Surveys.

We explored the feasibility of update factors from the Area Wage Surveys. Annual percent increases in the wages of office-clerical workers and of registered industrial nurses by MSA were taken from various issues of the BLS publication <u>Current Wage Developments</u>. Wage update factors from 1979-1985 for clerical workers and for industrial nurses were computed for each MSA surveyed by BLS. An area not surveyed by BLS received the average update factor of (1) its consolidated MSA, if it was part of a CMSA, (2) its state, if there was any data for the state, and (3) the regional average, otherwise.

The update factors were used to inflate the Census 1979 hourly earnings forward to 1985. The earnings of four occupations are used in the employee proxy: administrative support workers, RNs, LPNs, and health technicians. The clerical update factors were applied to the earnings of administrative support personnel, and the RN update factors were applied to the earnings of the three medical occupations. A 1985 employee proxy was then created from the updated earnings series using the same methodology used to create the 1979 proxy.

How does the 1985 employee proxy compare to the 1979 proxy? Table V-6 shows the percent change in the proxy for the 20 most populous MSAs, ranked

according to percent change. The range is plus or minus 5 percent. Employee wages in Dallas increased about 5 percent faster than the national average, while those in Detroit fell about 5 percent relative to the average. Changes in the proxy seem plausible. Most of the declines are in the "rust belt," while the largest increases are in Texas (1985 is before oil prices fell sharply), the West Coast, and the Northeast. Similar patterns are evident in Table V-7, which shows the 10 largest percentage increases and decreases among all areas surveyed by BLS.

These tables show some of the gains in accuracy possible when update factors are disaggregated below the regional level. For instance, Minneapolis—St. Paul and Detroit are both in the Midwest, yet wages grew by 1.8 percent relative to the national average in Minneapolis, while they fell by 4.9 percent in Detroit. Similarly, Boston and Pittsburgh are both in the Northeast, but the employee proxy grew by 2.4 percent in the former area and fell by 3.1 percent in the latter area.

Table V-8 shows urban-rural and regional changes between 1979 and 1985 relative to the national average. Not surprisingly, this method of updating does not change the 1979 urban-rural differential. The BLS does not survey nonmetropolitan areas, so update factors for rural areas were imputed using state or regional averages of urban areas. On the other hand, the regional differences are modified. Wages in the Midwest have fallen by 2.2 percent relative to the national average, while those in the South have grown by 1.5 percent.

We conclude that it is feasible to update the employee proxy using wage inflation factors from the BLS's Area Wage Surveys. Compared to the

Table V-6

Percentage Change in GMEI Employee Wage Proxy:
20 Most Populous MSAs, Ranked from Highest to Lowest
1979-1985

MSA	1985 Proxy	1979 Proxy	Percent Change
Dallas, TX	1.075	1.022	5.2%
Los Angeles, CA	1.230	1.185	3.8
Boston, MA	1.067	1.043	2.4
Houston, TX	1.122	1.098	2.2
San Francisco-Oakland, CA	1.286	1.259	2.1
Minneapolis, MN	1.057	1.039	1.8
New York, NY	1.264	1.245	1.5
Anaheim, CA	1.143	1.127	1.4
San Diego, CA	1.018	1.014	0.4
Washington, DC	1.160	1.165	-0.5
Nassau-Suffolk, NY	1.067	1.079	-1.2
Atlanta, GA	0.987	0.999	-1.2
Newark, NJ	1.096	1.110	-1.2
Baltimore, MD	1.060	1.074	-1.4
Chicago, IL	1.131	1.155	-2.1
St. Louis, MO	0.974	0.995	-2.1
Philadelphia, PA	1.027	1.057	-2.9
Pittsburgh, PA	1.000	1.033	-3.1
Cleveland, OH	1.035	1.074	-3.6
Detroit, MI	1.147	1.205	-4.9

Source: BLS (various years).

Table V-7

Percentage Change in GMEI Employee Wage Proxy:
10 Largest Increases and 10 Largest Decreases a 1979-1985

MSA	1985 Proxy	1979 Proxy	Percent Change
<u>10 r</u>	Largest Increases		
Richmond, VA	1.031	0.957	7.8%
Dallas, TX	1.075	1.022	5.2
Louisville, KY	0.986	0.943	4.5
Poughkeepsie, NY	1.050	1.008	4.1
San Antonio, TX	0.956	0.919	4.1
Corpus Christi, TX	0.952	0.916	3.9
Los Angeles, CA	1.230	1.185	3.8
Jackson, MS	0.956	0.926	3.3
Oklahoma City, OK	0.993	0.962	3.3
Greenville, SC	0.905	0.882	2.7
<u>10 I</u>	argest Decreases		
Gary-Hammond, IN	1.049	1.118	-6.1
Davenport, IA	0.959	1.011	-5.2
Detroit, MI	1.147	1.205	-4.9
York, PA	0.907	0.946	-4.1
Indianapolis, IN	0.961	1.000	-3.8
Cleveland, OH	1.035	1.074	-3.6
Saginaw-Bay City, MI	1.067	1.106	-3.5
Pittsburgh, PA	1.000	1.033	-3.1
Buffalo, NY	0.944	0.973	-2.9
Philadelphia, PA	1.027	1.057	-2.9

Source: BLS (various years).

a. Among areas surveyed by BLS.

Table V-8

Relative Impact of Area Wage Survey
Update Factors on the Employee Proxy

	Percent Change, 1979-1985 ^a
Metropolitan	0.0%
Nonmetropolitan	0.0
Regions	
Northeast	-0.7
Midwest	-2.2
South	1.5
West	1.4

Source: BLS (various years).

a. Relative to the national average.

alternatives, these data have the advantage of greater geographical and occupational specificity. The update factors we produced seem plausible. The major disadvantages of this approach to updating are the imputation that is necessary for smaller MSAs and rural areas (300 areas) and the complexity of calculating the update factors.

Recommendation

As the above discussion indicates, there are no ideal methods for updating the Census-based proxies. In addition, no approach is widely accepted.

If updating becomes necessary to the implementation of a GMEI policy, it would be reasonable to use the CPI methodology. Not only would the CPI result in the smallest changes in GMEI values across areas, but it is produced on a timely basis and is widely used to adjust payments (e.g., social security). The weakness of applying the CPI is the aggregation of many diverse areas into broad cells. Some intra-cell variations would not be measured; these could be important. Therefore, using the Census proxies without updating may be the most defensible approach, at least in terms of evaluating GMEI alternatives.

VI. THE ISSUE OF PHYSICIANS IN RURAL AREAS

A major issue regarding physician payment is how much to pay physicians in rural areas relative to urban areas. In a separate analysis (Pope et al., 1989), we compared the GMEI to an index of Medicare prevailing charges. (These charges pertained to 67 services, including many of those most costly to Medicare.) Although in rural areas prevailing charges are 12 percent below the national average, the cost of practice is 13 percent below average. By this measure, prevailing charges are not too low in rural areas and the use of the GMEI would not noticeably increase or decrease payment levels in rural areas.

Some policymakers are concerned about a shortage of physicians in rural areas. Much of the debate is in terms of physician-to-population ratios. For primary care physicians, this ratio is about 50 percent greater in urban areas than rural areas in 1986 (AMA, 1987a; cf. Schwartz et al., 1980). As measured in terms of access instead of manpower, the urban-rural differential is much smaller. In 1987 urban residents had 10 percent more physician visits per capita (NCHS, 1988). However, by some measures rural residents are sicker: they are 23 percent more likely to have activity limitation due to chronic conditions and 28 percent more likely to perceive their health status to be fair or poor (NCHS, 1988). However, the 28 percent greater proportion of low health status does not necessarily imply that 28 percent more physicians are needed. In sum, whether there is a serious shortage of physicians in rural area is an open question.

A basic question in the context of GMEI is whether it actually costs less to practice in rural areas than in urban areas. If costs were lower in rural areas, then it might be hard to argue that lower rural fees are a major cause of the physician availability differences. The GMEI measures variation in the prices physicians pay for practice inputs, including their own time. Average annual expenses, on the other hand, represent the total nonphysician costs of producing medical services during a year. Average annual expenses in rural areas were 1 percent above the national average in 1986 (AMA, 1987b). If rural physicians produce more services annually or employ more inputs per unit of service than urban physicians, then their total costs may be higher even though the input prices they face may be lower.

Rural physicians provide well above national average rates of services, as measured in terms of total visits (AMA, 1987b). Rural physicians see 19 percent more patients during visits than physicians nationally. If rural physicians' input costs were the same as those of urban physicians, one might expect rural average annual expenses to also be 19 percent above the national average. However, the fact that their expenses were only 1 percent above average suggests that nonphysician input costs could be as much as 18 percent below average. Excluding the physician time component, our baseline GMEI indicates that nonphysician input costs are only 13 percent below average. Some of this discrepancy could be due to heterogeneity in visits or to the fact that physicians provide many services other than visits. However, it seems clear that these data on expenses and visits do not support the argument that the GMEI is understating rural costs.

Confusion about the correspondence between the GMEI and annual expenses would be reduced if the GMEI were thought of as an index of the unit costs of producing medical services. Though these unit costs are lower in rural areas, a reimbursement system that reflected this could still pay more, in total, to rural physicians because they provide more services. The higher volume in rural areas could offset lower fees so as to cover their higher total costs.

The second way that input prices could be lower while total expenses are higher in rural areas is that rural physicians could employ more inputs per unit of output. This could be due to inefficiencies in rural practices or due to an inadequate supply of auxiliary services (e.g., laboratories or hospital outpatient departments) as compared to urban practitioners. These inadequacies might cause rural practices to be more vertically-integrated, i.e., maintain practices capable of providing a broader range of services than an urban practice. While this might require additional employment of all practice inputs, in this context concerns center around greater costs associated with physical capital. If rural physicians had to maintain more equipment or stock more supplies, fixed practice costs and, as such, the unit costs of producing services would be driven upward. As an index with the same cost share weights in all areas, the GMEI does not take into account input-mix differences. the extent that these differences produce meaningful unit cost variations, the GMEI is not able to capture them. However, no other index that could be computed with available data is likely to do better.

We assess the degree to which the GMEI may understate costs in rural areas by analyzing the cost shares. If the uniform cost shares in the present indices assign a weight higher than an area-specific weight to inputs that are less costly in rural areas, the GMEI might be biased downward for rural physicians. As shown in Table VI-1, rural physicians spend more on employee wage, supplies, and equipment and less on rent and malpractice insurance. They also retain a smaller share as net income. Most of the reduction in net income as a cost share is offset by an increase in employee wages. Since the prices of these inputs are highly correlated, these shifts have little effect on the index values.

Table VI-1
Input Cost Shares: Rural vs. Urban

444-499-429-1	Net Income ^a	Non- physician Employee Wages	Office Rent	Mal- practice Insurance	Medical Supplies	Medical Equipment	Other
Rural	51.4	17.4	11.2	4.0	5.9	3.3	6.9
Urban	54.9	15.0	11.4	4.7	4.6	2.5	6.9
Difference	-3.5	2.4	-0.2	-0.7	1.3	0.8	0.0

Source: AMA (1987b).

Note: This data pertains to 1986.

^a This serves as the weight for physicians' own time.

The major potential source of measurement error relates to equipment and supplies. Table VI-1 shows that the cost shares for these inputs are 2.1 percent higher in rural than in urban areas. (Shifts in rent and malpractice are fairly small.) Because we have assumed that equipment and supply prices are sold in a national market (i.e., their prices do not vary across areas), these are relatively the most expensive inputs to rural physicians as measured by the GMEI. Accepting this assumption, we are not understating unit costs in rural by more than 2.1 percent. This is, of course, a rough guess since changes in rents and malpractice are not taken into account. However, it seems that any biases resulting from cost share differences between urban and rural areas will be small.

Policy Options

The Physician Payment Review Commission (PPRC, 1989) has recommended an overhead-only index, which was analyzed in chapter IV. This policy recognizes differences in employee wages, rents, and malpractice premiums but ignores physician cost-of-living differences. It compensates physicians at the same nominal rate in all areas but at different real rates. However, if the policy goal is to increase payments to rural physicians relative to the status quo, differences in cost of living among urban areas still could be recognized. We suggest two policy options.

The first option is to set a floor for the physician proxy in rural areas at the national average (1.00). To maintain budget neutrality, the modified

proxy would have to be lowered in urban areas by 2.1 percent on average. This "rural-only floor" index would be 7.3 percentage points higher in rural areas than the baseline, as would the overhead-only index (Table IV-4). In the largest metropolitan areas, a rural-only floor index would be about 2.1 percentage points lower, whereas the overhead-only index would be 10.2 percentage points lower (Table IV-4).

In rural areas, the rural-only floor would be the same as the overhead-only index (except in rural Alaska, where the rural-only floor would be about 20 percentage points higher). In urban areas, the rural-only floor would be the same as the baseline index except that all values would be lowered by the same percent to maintain budget neutrality. The rural-only floor would recognize that cost of living is substantially higher in large metropolitan areas than in small ones, while still raising payment in rural areas relative to the baseline index.

A second option involves a physician proxy that does not take a value below some arbitrarily set floor in any area (urban or rural), perhaps chosen as some proportion of the national average proxy. To illustrate this approach, we computed a proxy with a floor of 90 percent of the national average.²

Areas with professional earnings above this floor retain their original proxy

^{1.} Because no rural area outside of Alaska and Rhode Island has a physician proxy above 1.00, renormalization can be simplified. A rural-only floor would increase the proxy in rural areas from .87 (Table IV-2) in the baseline proxy to 1.00. Rural areas have only 23 percent of the population, so the proxy average increases by 2.99 percent (i.e., (1-.87) times .23). Since the physician component has a weight of .542, when the proxy average increases by 2.99 percent, the index average increases by 1.62 percent. To spread this increase over urban areas, the index in urban areas must be lowered by 2.10 percent (i.e., 1.62 divided by (1-.23)). Renormalization involves dividing each urban index value by 1.0210.

The proxy is then renormalized so that the new proxy has a weighted national average of 1.00.

values prior to renormalization. The overhead-only index has, in a sense, a floor equal to the maximum proxy value.

The 90 percent floor raises the index in rural areas by 3.2 percentage points and lowers it in urban areas by 1.0 percentage points relative to the baseline. These changes are in the same direction as those of the overhead-only index, but the magnitudes are about half as large, on average. In addition, the 90%-floor GMEI lowers the index in the seven largest MSAS by only 1.6 percentage points, whereas the overhead-only index lowers it by 10.2 percentage points. By acknowledging the higher living costs in larger cities, a floor on the physician proxy may provide a more equitable way of raising payment rates in rural areas than the PPRC option.

A floor index would have a secondary advantage: it would increase the index for any outliers on the low side. There are two ways to view particularly low values for some MSAs. On the one hand, these outliers may basically represent stochastic errors. On the other hand, these outliers may occur in areas that can truly attract physicians at low earnings (because of low cost of living and high amenities). If so, these areas would have their index inappropriately increased. Regardless of the cause of the low values, a floor would raise the areas that are most likely to complain.

The level of the floor, if any, depends largely on two factors: i) the extent to which one believes there is a relative shortage of physicians in rural areas, as discussed above, and ii) the extent to which the baseline option in conjunction with the resource-based relative value scale (RBRVS) would imply more payment to rural physicians than prevailing charges. The RBRVS implies increased fees for primary care physicians, who are disproportionately in rural areas. In conjunction with the RBRVS, the baseline option would increase fees by several percentage points. If further

redistribution toward rural areas is desired, a floor is worthy of consideration as a policy option.

VII. CONCLUSION

The process of refining the interim GMEI had two parts. First, we acquired a larger Census sample upon which to base the physician and employee price proxies. This enabled us to compute geographic professional earnings differentials that incorporated both an occupation—mix and education adjustment. In addition, the larger sample reduced the random variations present in our interim indices. Second, we employed more recent data to derive the office rent and malpractice proxies as well as the cost share weights.

This report also considered a number of important issues that need to be addressed before a geographic index could be applied to physician payments.

Included among these were: (1) the impact of basing the GMEI on policy options as opposed to one of the technically-derived alternatives; (2) the methodology that could be employed to update the 1980 Census data to the current year; and (3) the treatment of rural areas.

We have considered four technical options—a baseline index and three others. Of these, only the index that does not adjust for occupation—mix gives us serious concern. It involves the most change from the baseline index, whether measured by numbers of winners and losers or by the average absolute difference. More importantly, the index seems to change in fairly predictable ways, suggesting that ignoring occupation mix could impart systematic bias to the index. For instance, the physician proxy that is not occupation—adjusted rises 16 percentage points in Huntsville, Alabama, which has a large NASA facility that employs a large number of engineers. The adjustment has the impact it was designed for: the changes are not simply the result of

stochastic error. The occupation adjustment should be included in all serious .

GMEI options.

Based on technical grounds, we would rank the remaining three technical options as follows:

- o the baseline proxy (using place-of-work data in CMSAs and placeof-residence data elsewhere and adjusting for both education and occupation-mix,
- o place-of-work proxy with both adjustments, and
- o place-of-work proxy that drops the education adjustment.

In considering these options, it is useful to think of a continuum in terms of simplicity. The baseline index is the technically most complete index but the least simple. The index without the education adjustment is the simplest but may have a serious technical flaw. The second index is necessarily in between. This continuum may help structure the discussion.

The baseline index is preferable, because it uses place-of-work data where it is essential and place-of-residence data where it increases precision. It is, however, the most complicated to explain, and this complication yields small changes in the values themselves. The least preferable index on narrow technical grounds does not adjust for education and thus less convincingly reflects physicians' preferences. However, the education adjustment is an additional complication.

Of the five policy options, three are based on the earnings of more than just professionals and therefore are conceptually less defensible. Our interim report argued that professional earnings was the best proxy for physicians' own time. It is a measure of what other professionals, who presumably have preferences similar to physicians, need to be paid in an area in order to compensate them for cost of living and amenity differences. The other two

policy options—per capita income and overhead only—are less conceptually sound because they are less related to cost of living.

However, if a policy option had values similar to the baseline index, it would make little empirical difference if that policy option was used instead of a technical option. But as Table IV-3 shows, each of the policy options has quite different values from the baseline index. Even under the most similar policy option, nonmanufacturing wages, almost one-fifth of the areas win or lose by more than 5 percentage points, whereas no more than 7 percent win or lose under any technical option. Policy options are, therefore, different from the technical in value as well as in concept.

The Physician Payment Review Commission, in its concern over physicians in rural areas, recommended an overhead-only index. We feel this would be a serious mistake. Besides unjustifiably redistributing Medicare payments from physicians in large urban areas to rural areas and small MSAs, such a policy might reduce the supply of physicians or physician services in some metropolitan areas.

This problem is definitely not academic, as illustrated by the experience of the FBI (Isikoff, 1988), which in 1988 increased its pay for agents in New York City by 25 percent.

"The new pay levels for New York...are the first response to what bureau officials say has become a growing morale and staffing problem in some of its key offices across the county.

"The problem has been most acute in New York, where pay scales have fallen so far behind the cost of living that agents were resigning rather than accepting transfers there,...

"The FBI is also considering raising the pay for agents in Los Angeles, San Francisco, Chicago, Boston, and Newark." [Emphasis not in the original]

Uniform nationwide pay rates are creating problems throughout the federal government. In fact, the National Commission on the Public Services recently recommended that federal pay vary by city, calling uniform nationwide rates "simplistic and unworkable" (Havemann, 1989).

By paying all agents the same, regardless of the cost of living of their location, the FBI is experiencing a supply response: its agents in New York are resigning. If Medicare physician payment rates were also constant throughout the country, physicians would probably try to increase their balance billing in New York City and other large metropolitan areas. To the extent that the maximum allowable actual charges (MAACs) limited balance billing, physicians might prefer non-Medicare patients and access could become a problem for Medicare beneficiaries. If all payers did not recognize cost-of-living differences, physicians might leave the large metropolitan areas.

It would be somewhat ironic for HCFA to ignore cost-of-living differences just when a crisis is forcing other parts of the federal government to recognize them. We, therefore, view the overhead-only index as the least desirable option reviewed in this report. If there are legitimate reasons to increase payment to physicians in rural areas, a floor index would result in more equitable treatment of high cost-of-living areas and, hence, is worthy of consideration.

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APPENDIX A

Description of Census Data

APPENDIX A: DESCRIPTION OF CENSUS DATA

This appendix describes the 1980 Census of Population and Housing data on which much of the analysis in this report is based. The appendix is divided into three sections: (1) variable and area definitions, (2) sample and sampling rates, (3) sample and nonsample sources of error.

Variable and Area Definitions

- (1) Hourly Earnings. For each person in the sample, hourly earnings was calculated by dividing annual earnings by annual hours worked. Annual earnings is defined as the sum of 1979 pre-tax income from wages or salaries and net (i.e., after business expenses) self-employment income. Interest, dividends, unemployment insurance, and other forms of "unearned" income are not included. Annual hours worked is defined as the product of weeks worked in 1979 (including paid vacation and sick leave) and usual hours worked per week. Mean hourly earnings was calculated by Census as a weighted average across workers in an occupation/area cell using the Census sample weights. Median hourly earnings was calculated by Census using standard linear and pareto interpolation methods, again using the sample weights.
- (2) Education. The Census questionnaire asks each respondent for the highest grade or year of school attended, but not for diplomas or degrees earned. For this reason, we defined a sample with some post-baccalaureate training as those who responded "5" or greater to the college portion of the Census education question.
- (3) Occupation. We requested earnings for certain occupational categories based on the 1980 Standard Occupational Classification Manual (SOC) published by the U.S. Department of Commerce. Census translated these requests into their own occupational classification system, which was developed to be

consistent with the SOC, but which is not identical. An individual's occupation is determined from his or her self-report on the Census questionnaire as coded by Census clerical staff.

- (4) Area. We obtained earnings by occupation data for each county, each Primary Metropolitan Statistical Area (PMSA), and the nonmetropolitan portion of each state. In New England, New England County Metropolitan Areas (NECMAS) were used in place of MSAs, which are not county-based there. To assign individuals to areas, Census developed a county-MSA equivalency file based on the 1986 Office of Management and Budget list of MSAs, which we verified.
- (5) Place of Residence and Place of Work. Census defines place of residence as the "usual place of residence, [which means] the place where the person lives and sleeps most of the time." Place of work is based on the exact address reported by the working respondent as the place he or she worked in the last week.

Sample and Sampling Rates

Sample. The sample for earnings by occupation was the experienced civilian labor force with earnings. The experienced civilian labor force comprises the employed and the experienced unemployed. The experienced unemployed are unemployed persons who have worked at any time in the past. The sample was restricted to those among the experienced civilian labor force who had earnings in 1979.

Sampling Rates. The 1980 Census attempted to enumerate all individuals living in the United States and certain basic information about them such as age, race, and sex. However, questions such as income, hours worked, occupation, and place of work on the Census "long form" were asked only of a sample of individuals. Two sampling rates were employed for the long form.

For most of the country, one in every six housing units (16.7 percent) received the long form. In counties, incorporated places and minor civil divisions estimated to have fewer than 2,500 inhabitants, every other housing unit (50 percent) received the long form to enhance the reliability of sample data in small areas. The overall national sample rate was about 20 percent (19.7 percent) of housing units. Thus, in highly urbanized areas which comprise most of MSAs, the sampling rate was 1 in 6 housing units, but was higher in nonmetropolitan areas which contain more governmental jurisdictions with population less than 2,500. The average MSA rate also exceeds 1 in 6 because some parts of MSAs may contain less densely populated governmental jurisdictions.

The place-of-work questions were coded for only one-half of the 20 percent of the population long-form sample. In addition, persons for whom place of work could not be determined were deleted from our place-of-work sample.

Census did not provide us with the actual number of persons upon which mean or median earnings were based, but rather the sum of the sampling weights. The sum of the weights is an estimate of the total number of persons in that area/occupation cell. For the place-of-residence sample, a rough estimate of the number of persons upon which the mean or median is based is obtained by dividing the estimated total number of persons in the cell by 6. For the place-of-work sample, the divisor is 12.

Sample and Nonsample Error

The Census data are subject to both sample and nonsample error. Sampling error arises because statistics calculated based on the 20 percent sample of the population may differ from values that would be obtained if all persons were enumerated. Nonsampling error arises from undercoverage, respondent or

enumerator error, processing errors, and nonresponse. For example, respondents may systematically underreport income. This type of error will not be eliminated by larger sample size.

In theory, standard errors can be calculated to indicate the sampling uncertainty of mean or median earnings compiled from the 20 percent sample Census data. The procedure is described in U.S. Bureau of the Census, <u>Detailed Population Characteristics Reports</u>, Appendix D. However, calculating the standard error of mean earnings requires the variance of the earnings distribution, and the standard error of the median requires even more detailed knowledge of the earnings distribution. Having no information on the distribution of earnings, only the mean and median, we cannot calculate standard errors as a function of sample size.

Census used various procedures to control nonsampling error, described in the Detailed Population Characteristics Reports series Appendix D, "Accuracy of the Data." Unacceptable data—either missing or inconsistent responses—was edited. For example, the income data was edited to improve consistency with work experience, occupation, and class—of—worker information. After editing, missing or unacceptable responses to economic questions such as industry, occupation, class of worker, work experience, and income were imputed from a single respondent with similar socioeconomic characteristics. Since virtually all Census data is self—reported and not verified, it may be less accurate than similar reports to sources subject to audit. For example, self—reported income is probably less accurate than income from IRS income tax records.

APPENDIX B

Input Price Proxies and GMEIs by MSA and Rural Area of States

Table B-1. Input Price Proxies

By MSA and Rural Area of States:

In Alphabetical Order

					_	
MSA	27	Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
40	ABILENE, TX	0.883	0.819	0.849	0.442	0.860
80	AKRON, OH	0.973	1.004	0.853	0.923	0.965
120	ALBANY, GA	0.920	0.883	0.755	0.753	0.897
160	ALBANY-SCHENECTADY-TROY, NY	1.023	0.971	0.941	0.966	1.000
200	ALBUQUERQUE, NM	0.939	0.941	1.011	0.769	0.946
220	ALEXANDRIA, LA	0.942	0.901	0.738	0.810	0.913
240	ALLENIOWN-BETHLEHEM, PA-NU	0.970	0.992	0.925	0.932	0.970
280	ALTOONA, PA	0.827	0.923	0.825	0.932	0.871
320	AMARILLO, TX	0 .88 9	0.901	0.779	0.505	0.872
360	ANAHEIM-SANTA ANA, CA	1.184	1.126	1.618	1.374	
380	ANCHORAGE, AK ANDERSON, IN ANDERSON, SC ANN ARBOR, MI ANNISTON, AL APPIETON-OSHKOSH-NEFNAH, WI	1.487	1.426			1.354
400	ANDERSON, IN	0.981	0.931	0.748	0.518	0.924
405	ANDERSON, SC	0.891	0.869	0.685	0.449	0.855
440	ANN ARBOR, MI	1.012	1.051	1.158	1.141	1.040
450	ANNISIUN, AL	0.913	0.884	0.679 0.78 7	0.826 0.637	0.889
460 480	APPLETON-OSHKOSH-NEENAH, WI	0.952 0.834	0.968 0.898	0.757	0.837	0.925 0. 832
500	ADTEVILLE, INC	0.823	0.855	0.737	0.753	0.843
520	ATT ANTA CA	0.901	0.833	1.083	0.753	0.943
560	ATLANTIC CITY, NI	1.069	0.973	1.115	1.156	1.055
600	AUGUSTA. GA-SC	0.876	0.875	0.781	0.753	0.875
620	AURORA-ELGIN, IL	0.955	1.009	1.219		1.009
640	AUSTIN, TX	0.874	0.927			
680	BAKERSFIELD, CA	1.112	1.053	1.106	1.374	1.102
720	BALTIMORE, MD	1.110	1.074			1.074
733	AFFLEION-OSHNOSH-NEENAH, WI ASHEVILLE, NC ATHENS, GA ATLANIA, GA ATLANIIC CITY, NU AUGUSTA, GA-SC AURORA-ELGIN, IL AUSTIN, TX BAKERSFIELD, CA BALTIMORE, MD BANGOR, ME BATON ROUGE, LA BATTLE CREEK, MI	0.806	0.84 9			0.846
760	BATON ROUGE, LA	0.964	0.965	0.926	0.810	0.956
780		1,000	1.081	0.779		1.049
840	BEAUMONT-PORT ARTHUR, TX	0.991	0.959	0.896	0.505	0.949
845	BEAVER COUNTY, PA	0.957	1.040	0.846	0.932	0.962
860 870	BELLINCHAM, WA	0.987 0.926	1.010 0.968	1.010 0.862	1.067 1.141	0.999 0.948
875	BENTON HARBOR, MI BERGEN-PASSAIC, NU	1.123	1.068	1.578	1.156	1.150
880	BILLINGS, MT	0.917	0.942	1.007	0.720	0.931
920	BILOXI-GULFPORT, MS	0.919	0.929	0.733	0.652	0.896
960	BINGHAMTON, NY	0.947	0.927	0.843	0.966	0.940
1000	BIRMINGHAM, AL	0.924	0.947	0.761	0.826	0.914
1010	BISMARK, ND	0.934	0.923	0.871	0.690	0.920
1020	BLOOMINGTON, IN	0.802	0.907	0.806	0.518	0.829
1040	BLOOMINGTON-NORMAL, IL	1.007	0.966	0.896	1 .1 40	0.994
1080	BOISE CITY, IDAHO	0.901	0.963	1.045	0.891	0.939
1123	BOSTON-LOWELL-BROCKTON-LAWRENCE	1.029	1.043	1.556	0.857	1.076
1125	BOULDER-LONGMONT, CO	0.948	0.943	1.109	0.685	0.957
1140	BRADENION, FL	0.843	0.877	1.004	1.110	0.902
1145 1150	BRAZORIA, TX	1.102 1.146	0.960 1.022	0.893 1.013	0.505 1.067	1.009
1163	BREMERTON, WA BRIDGEPORT-STAMFORD-NORWALK-DAN	1.227	1.022	1.412	1.249	1.088 1.196
1240	BROWNSVILLE-HARLINGEN, TX	0.922	0.859	0.795	0.505	0.885
1260	BRYAN-COLLEGE STATION, TX	0.912	0.837	1.054	0.505	0.905
1280	BUFFALO, NY	1.036	0.973	0.844	0.966	0.996
1300	BURLINGTON, NC	0.863	0.907	0.916	0.378	0.867
1303	BURLINGTON, VI	0.843	0.896	1.188	0.534	0.893
1320	CANTON, OH	0.965	0.952	0.755	0.923	0.942

MSA	Nome	Physicians'	Employee	Office	Malpractice	Baseling
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
1350	CASPER, WY	1.111	0.957	1.156	0.642	1.051
1360	CEDAR RAPIDS, IA	0.944	0.943	0.929	0.667	0.934
1400	CHAMPAIGN-URBANA-RANTOUL, IL	0.834	0.927	0.929	1.140	0.892
1440	CHARLESTON, SC	0.912	0.903	0.871	0.449	0.882
1440	CHARLESTON, SC CHARLESTON, WV	0.988	0.903	1.017	0.449	0.002
1520	CHARLOTTE-GASTONIA-ROCK HILL, N	0.907	0.976	0.831	0.378	0.973
1540 1540	CHARLOTTECTITE TA	0.907	0.924	0.831	0.378	0.867
1540 1560	CHARLOTTESVILLE, VA CHATTANOOGA, TN-GA CHEYENNE, WY CHICAGO, IL CHICO, CA	0.827	0.928	0.849		0.882
1580	CHEVENNE LIV	1.008		0.849		
	CHTCACO TI	1.008 . 1.175	1.155			0.975
1600	CUTCO CA	1.1/2		1.193		1.184
1620	CTATATATATE OF ESS TAT	0.965	0.970	0.970		0.994
1640	CINCINNATI, OH-KY-IN	0.956	1.034	0.790		0.954
1660	CLARKSVILLE-HOPKINSVILL, TN-KY		0.868	0.830	0.408	0.839
1680	CLEVELAND, OH	1.076	1.074	0.812	0.923	1.027
1720	COLORADO SPRINGS, CO	0.939	0.899	0.900	0.685	0.922
1740	COLUMBIA, MO	0.803	0.869	0.852	1.181	0.866
1760	CULUMBIA, SC	0.876	0.916	0.858	0.449	0.873
1800	CULUMBUS, GA-AL	0.816	0.861	0.704	0.753	0.832
1840	COLUMBUS, OH	0.931	0.988	0.859	0.923	0.941
1880	COLUMBIA, MO COLUMBIA, SC COLUMBUS, GA-AL COLUMBUS, OH CORPUS CHRISTI, TX CUMBERLAND, MD-W VA DALLAS, TX	0.905	0.916	0.918	0.505	0.899
1900	CUMBERLAND, MD-W VA	0.884	0.946	0.738	0.845	0.891
1920	,	0.983	1.022	0.863	0.505	0.952
1950	DANVILLE, VA	0.914	0.858	0.751	0.532	0.877
1960	DAVENPORT-ROCK ISLAND-MOLINE, I	1.024	1.011	0.954	0.667	0.991
2000	DAYTON-SPRINGFIELD, OH	1.017	0.998	0.786	0.923	0.981
2020	DAYTON-SPRINGFIELD, OH DAYTONA BEACH, FL	0.911	0.848	0.969		0.931
2040	DECATUR, IL DENVER, CO DES MOINES, IA DEIROIT, MI DOTHAN, AL DUBUQUE, IA DULUTH, MN-WI EAU CLAIRE, WI	0.956	1.001	0.871	1.140	0.970
2080	DENVER, CO	1.079	1.058	1.024		1.037
2120	DES MOINES, IA	0.988	0.965	0.925		0.961
2160	DETROIT, MI	1.249	1.205	1.046	1.779	1.216
2180	DOTHAN, AL	0.862	0.866	0.790		0.871
2200	DUBUQUE, IA	0.875	0.928	0.856	0.667	0.886
2240	DULUTH, MN-WI	0.984	0.978	0.853	0.749	0.957
2290	EAU CLAIRE, WI	0.952	0.895	0.781	0.637	0.913
2320	EL PASO, TX	0.978	0.883	0.783	0.505	0.918
2330	ELKHART-GOSHEN, IN	0.964	0.938	0.787	0.518	0.920
2335	ELMIRA, NY	0.953	0.917	0.767	0.966	0.945
2340	ENID, OK	0.811	0.909	0.871	0.517	0.842
2360	ERIE, PA	0.918	0.947	0.871	0.932	0.938
2400	EUGENE-SPRINGFIELD, OR	0.870	0.947	1.067	0.953	0.932
2440	EVANSVILLE, IN-KY	0.870 0.944	0.990	0.809	0.518	0.932
2520	FARGO-MOORHEAD, ND-MN	0.889	0.936	0.809	0.690	0.896
2560						
	FAYETTEVILLE, NC	0.931	0.910	0.724	0.378	0.883
2580 2640	FAYETTEVILLE-SPRINGDALE, AR	0.722	0.842 1.167	0.745	0.303	0.757
2640 2650	FLINT, MI	1.140	1.167	0.819	1.779	1.126
2650 2655	FLORENCE, AL	0.981	0.892	0.717	0.826	0.932
2655	FLORENCE, SC	0.902	0.881	0.697	0.449	0.864
2670	FORT COLLINS-LOVELAND, CO	0.894	0.909	1.036	0.685	0.915
2680	FORT LAUDERDALE—HOLLYWOOD—POMPA	0.974	0.951	1.086	1.665	1.025
2700	FORT MYERS-CAPE CORAL, FL	0.953	0.855	1.032	1.110	0.961
2710	FORT PIERCE, FL	0.928	0.900	1.032	1.110	0.955
2720	FORT SMITH, AR-OK	0.849	0.898	0.724	0.303	0.833
2750	FORT WALTON BEACH, FL	0.890	0.860	0.688	1.110	0.890
2760	FORT WAYNE, IN	0.977	0.979	0.809	0.518	0.936

MSA	Nama	Physicians' Own Time	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
2800	FORT WORTH-ARLINGTON, TX	0.893	0.933	0.863	0.505	0.888
2840	FRESNO, CA	1.032	1.022	1.010	1.374	1.043
2880	GADSDEN, AL	0.883	0.922	0.628	0.826	0.873
2900	GAINESVILLE, FL	0.870	0.854	0.872	1.110	0.898
2920	GALVESTON-TEXAS CITY, TX	0.928	1.036	0.834	0.505	0.921
2960	GARY-HAMMOND, IN	1.040	1.118	0.972	0.653	1.017
2975	GLENS FALLS, NY	0.946	0.902	0.896		0.942
2985	GRAND FORKS, ND	0.871	0.911	0.827		0.879
3000	GRAND RAPIDS, MI	1.012	0.985	0.929		1.004
3040	GREAT FALLS, MT	0.950	0.913	0.868	0.720	0.929
3060	GREELEY, CO	0.872	0.897		0.685	0.886
3080	GREEN BAY, WI	0.980	0.971	0.787		0.941
3120	GREENSBORO-WINSTON-SALEM-HIGH P	0.910	0.910	0.793	0.378	0.879
3160	GREENVILLE-SPARTANBURG, SC	0.899	0.882	0.751	0.449	0.868
3180	HAGERSTOWN, MD	0.932	0.975	0.859	0.845	0.935
3200	HAMILTON-MIDDLETOWN, OH	0.962	0.992	0.887	0.923	0.961
3240	HARRISBURG-LEBANON-CARLISE, PA	0.949	1.015	0.973	0.932	0.968
3283	HARTFORD-MIDDLETOWN-NEW BRITAIN	1.033	1.030	1.239	0.999	1.049
3290	HICKORY, NC	0.800	0.856	0.694	0.378	0.800
3320	HONOLULU, HI	1.025	1.058	1.278	1.028	1.055
3350	HOUMA-THIBODAUX, LA	0.906	0.959	0.821	0.810	0.912
3360	HOUSTON, TX	1.056	1.098	0.796		1.004
3400	HUNTINGTON-ASHLAND, WV-KY-OH	0.911	0.935	0.841	0.690	0.906
3440	HUNTSVILLE, AL	0.962	0.889	0.798	0.826	0.930
3480	INDIANAPOLIS, IN	0.990	0.999	0.841	0.518	0.950
3500	IOWA CTTY, IA	0.839	0.935	0.973		0.881
3520	JACKSON, MI	1.097	1.052	0.853	1.141	1.052
3560 3580	JACKSON, MS	0.848 0.910	0.926 0.874	0.932 0.768	0.652 0.408	0.879
3600	JACKSON, TN JACKSONVILLE, FL	0.910	0.874	0.768	1.110	0.873 0.945
3605	JACKSONVILLE, NC	0.929	0.842	0.720	0.378	0.945
3620	JANESVILLE-BELOIT, WI	0.945	0.920	0.720	0.637	0.923
3640	JERSEY CITY, NJ	1.142	1.134	1.081	1.156	1.116
3660	JOHNSON CITY-KINGSPORT-BRISTOL,	0.920	0.906	0.710	0.408	0.876
3680	JOHNSTOWN, PA	0.937	0.942	0.803	0.932	0.931
3690	JOLIET, IL	1.051	1.028	1.226	1.140	1.065
3710	JOPLIN, MO	0.900	0.842	0.657	1.181	0.893
3720	KALAMAZOO, MI	1.072	1.039	0.862	1.141	1.038
3740	KANKAKEE, IL	0.882	0.969	0.862	1.140	0.924
3760	KANSAS CITY, MO-KS	0.913	0.988	0.885	1.181	0.948
3800	KENOSHA, WI	0.946	1.104	0.945	0.637	0.961
3810	KILLEEN-TEMPLE, TX	0.876	0.870	0.773	0.505	0.859
3840	KNOXVILLE, IN	0.867	0.900	0.781	0.408	0.855
3850	KOKOMO, IN	1.061	0.957	0.822	0.518	0.980
3870	LA CROSSE, WI	0.840	0.884	0.928	0.637	0.867
3880	LAFAYETTE, LA	0.948	0.937	0.926	0.810	0.943
3920	LAFAYETTE, IN	0.838	0.864	0.869	0.518	0.850
3960	LAKE CHARLES, LA	0.899	0.951	0.732	0.810	0.897
3965	LAKE COUNTY, IL	1.045	1.102	1.251	1.140	1.076
3980 4000	LAKELAND-WINIER HAVEN, FL	0.882 0.883	0.861	0.825 0.994	1.110	0.901
4040	LANCASTER, PA LANSING-EAST LANSING, MI	1.006	0.9 5 3 1.078	0.994	0.932 1.141	0.925 1.013
4080	LAREDO, TX	0.871	0.821	0.733	0.505	0.845
4100	LAS CRUCES, NM	0.880	0.833	0.733	0.769	0.874
4100	LES CAUCED, INT	0.000	0.000	0.002	0.709	0.074

MSA		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
4120	LAS VEGAS, NV	1.146	1.053	1.223	1.147	1.120
4150	LAWRENCE, KS	0.772	0.848	0.935	0.758	0.832
4200	LAWTON, OK	0.880	0.903	0.749	0.517	0.865
4243	LEWISTON-AUBURN, ME	0.748	0.837	0.824	0.718	0.803
4280	LEXINGTON-FAYETTE, KY	0.869	0.919	0.877	0.668	0.884
4320	LLMA, OH	0.900	0.939	0.800	0.923	0.910
4360	LINCOLN, NE	0.852	0.879	0.859	0.436	0.853
4400	LITTLE ROCK-NORTH LITTLE ROCK,		0.938	0.860	0.303	0.884
4420	LONGVIEW-MARSHALL, TX	0.870	0.902	0.882	0.505	0.873
4440	LORAIN-ELYRIA, OH	0.951	0.989	0.840		0.950
4480	LOS ANGELES-LONG REACH, CA	1.238	1.185	1.449	1.374	1.229
4520	LOUISVILLE, KY-IN	0.968	0.943	0.749		0.927
4600	LUBBOCK, TX	0.800	0.869	0.754		0.816
4640	LYNCHBURG, VA	0.822	0 .884	0.809		0.838
4680	MACON-WARNER ROBINS, GA	0.829	0.917	0.784	0.753	0.857
4720	MADISON, WI	0.909	0.987	0.942	0.637	0.922
4763	MANCHESTER-NASHUA, NH	0.876	0.927	1.248	0.603	0.927
4800	MANSFIELD, OH	0.898	0.957	0.723	0.923	0.903
4880	MCALLEN-EDINBURG-MISSION, TX	0.780	0.821	0.792	0.505	0.802
4890	MEDFORD, OR	0.895	0.955	1.059	0.953	0.940
4900	MELBOURNE-TITUSVILLE, FL	0.917	0.913	0.934	1.110	0.940
4920	MEMPHIS, TN-AR-MS	0.880	0.960	0.827	0.408	0.876
4940	MERCED, CA	1.088	0.980	0.991	1.374	1.064
5000	MIAMI-HIALEAH, FL	1.148	1.019	1.087	1.665	1.130
5015	MIDDLESEX-SOMERSET-HUNTERDON, N	1.164	1.093	1.452	1.156	1.162
5040	MIDLAND, TX	1.090	0.984	1.016		1.020
5080	MILWAUKEE, WI	1.031	1.074	0.929	0.637	1.000
5120	MINNEAPOLIS-ST PAUL, MN-WI MOBILE, AL	1.070	1.039	1.079		1.039
5160			0.894	0.827		0.877
5170	MODESTO, CA	1.066	1.005	1.062		1.065
5190	MONMOUTH-OCEAN, NU MONROE, LA MONTGOMERY, AL	1.165	0.971	1.305		1.128
5200	MONROE, LA	0.917	0.880	0.735		0.896
5240	MUNICOMERY, AL	0.914	0.936	0.733	0.826	0.904
5280	HUIVLE, III	0.944	0.895	0.702	0.518	0.893
5320	MUSKEGON, MI	1.030	0.997	0.759	1.141	0.997
5345	NAPLES, FL	1.041	0.891	1.058	1.110	1.018
5360	NASHVILLE, TN	0.912	0.922	0.931	0.408	0.899
5380	NASSAU-SUFFOLK, NY	1.245	1.079	1.541	2.134	1.269
5403	NEW BEDFORD-FALL RIVER-ATTLEBOR	0.965	0.945	0.992	0.857	0.963
5483	NEW HAVEN-WEST HAVEN-WATERBURY-	0.965	0.995	1.270	1.149	1.018
5523	NEW LONDON-NORWICH, CT-RI	0.989	0.988	1.188	1.149	1.021
5560	NEW ORLEANS, LA	0.978	1.001	1.021	1.197	1.002
5600	NEW YORK, NY	1.237	1.245	1.578	1.865	1.279
5640 5700	NEWARK, NJ	1.196	1.109	1.218	1.156	1.156
5720	NIAGARA FALLS, NY	1.069	0.968	0.811	0.966	1.010
5775	NORFOLK-VIRGINIA BEACH-NEWPORT	0.902	0.927	0.973	0.665	0.914
5790	OAKLAND, CA	1.113	1.249	1.580	1.374	1.186
5800	OCALA, FL	0.794	0.848	0.761	1.110	0.844
5880	ODESSA, TX	1.032	0.921	1.008	0.505	0.978
5910	OKLAHOMA CTTY, OK	0.877	0.962 1.045	0.919	0.517	0.891
5920	OLYMPIA, WA OMAHA, NE-IA	1.097	1.045 0.947	1.046 0.846	1.067 0.436	1.068
5950	ORANGE COUNTY, NY	0.899 0.993	0.947	1.152	1.651	0.888 1.041
5960	ORLANDO, FL	0.956	0.946	0.979	1.110	0.962
2500	ordeneo, III	U. 7J0	0.004	0.7/7	1.110	0.502

MSA		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
5000	OF THE ICTION OF 188	0.010	0.007	0.606	0.660	0.000
5990	OWENSBORO, KY	0.919	0.937	0.686	0.668	0.893
6000	OXNARD-VENTURA, CA	1.135	1.066	1.384	1.374	1.147
6015	PANAMA CITY, FL	0.918	0.816	0.732	1.110	0.903
6020	PARKERSBURG-MARIETTA, WV-OH	0.893	0.901	0.786	0.690	0.885
6025	PASCAGOULA, MS	0.866	0.925	0.800	0.652	0.874
6080	PENSACOLA, FL	0.891	0.868	0.818	1.110	0.906
6120	PEORIA, IL	1.046	1.096	1.007	1.140	1.049
6160	PHILADELPHIA, PA-NJ	1.076	1.057	1.045	1.749	1.097
6200	PHOENIX, AZ	1.012	0.945	1.134	1.258	1.027
6240	PINE BLUFF, AR	0.829	0.875	0.717	0.303	0.817
6280	PITTSBURGH, PA	1.027	1.032	0.894	1.044	1.010
6323	PITTSFIELD, MA	0.980	0.931	1.077	0.857	0.979
6403	PORTLAND, ME	0.855	0.911	1.219	0.718	0.916
6440	PORTLAND, OR	0.972	1.082	1.002	0.953	0.995
6453	PORTSMOUTH-DOVER-ROCHESTER, NH	0.898	0.923	1.210	0.603	0.934
6460	POUCHKEEPSIE, NY	1.110	1.008	1.299	0.966	1.092
6483	PROVIDENCE-PAWTUCKET-WOONSOCKET	1.037	0.958	1.064	0.736	1.006
6520	PROVO-OREM, UT	0.944	0.877	0.827	0.741	0.917
6560	PUEBLO, CO	1.144	0.942	0.894	0.685	1.039
6600	RACINE, WI	1.123	1.056	0.884	0.637	1.042
6640	RALEIGH-DURHAM, NC	0.898	0.951	0.907	0.378	0.892
6660	RAPID CTTY, SD	0.885	0.847	0.770	0.689	0.871
6680	READING, PA	0.980	0.927	0.929	0.932	0.966
6690	REDDING, CA	1.101	0.998	1.010	1.374	1.076
6720	RENO, NV	1.054	1.068	1.509	1.147	1.105
6740	RICHLAND-KENNEWICK, WA	1.007	1.073	1.181	1.067	1.039
6760	RICHMOND-PETERSBURG, VA	0.914	0.957	0.884	0.452	0.903
6780	RIVERSIDE-SAN BERNARDINO,CA	1.105	1.080	1.177	1.374	1.110
6800	ROANOKE, VA	0.916	0.932	0.789	0.532	0.894
6820	ROCHESTER, MN	1.018	0.975	0.918	0.749	0.983
6840	ROCHESTER, NY	1.096	1.046	1.019	0.966	1.059
6880	ROCKFORD, IL	0.966	0.975	0.915	1.140	0.976
6920	SACRAMENTO, CA	1.112	1.116	1.171	1.374	1.119
6960	SAGINAW-BAY CTTY-MIDLAND, MI	1.142	1.106	0.837	1.141	1.083
6980	ST CLOUD, MN	0.925	0.881	0.875	0.749	0.913
7000	ST JOSEPH, MO	0.799	0.873	0.698	1.181	0.848
7040	ST LOUIS, MO-IL	0.971	0.995	0.916	1.418	0.998
7080	SALEM, OR	0.895	1.005	0.997	0.953	0.941
7120	SALINAS—SEASIDE—MONTEREY, CA	1.148	1.055	1.210	1.374	1.133
7160	SALT LAKE CITY-OGDEN, UI	0.975	0.964	0.944	0.741	0.960
7200	SAN ANGELO, TX	0.815	0.852	0.855	0.741	0.833
7240	SAN ANTONIO, TX	0.891	0.032	0.858	0.505	0.884
7320	SAN DIEGO, CA	1.111	1.013	1.326	1.374	1.119
7360	SAN FRANCISCO, CA	1.151	1.259	1.730	1.374	1.224
7400						
7480	SAN JOSE, CA	1.191	1.225	1.719	1.374	1.240
	SANTA CRIFT CA	1.093	1.030	1.370	1.374	1.117
7485	SANTA CRUZ, CA	1.023	1.039	1.548	1.374	1.100
7490	SANTA FE, NM	0.981	0.948	1.177	0.769	0.988
7500	SANTA ROSA-PETALUMA, CA	1.052	1.081	1.362	1.374	1.102
7510	SARASOTA, FL	0.936	0.878	1.086	1.110	0.962
7520	SAVANNAH, GA	0.863	0.914	0.796	0.753	0.876
7560	SCRANTON-WILKES BARRE, PA	0.910	0.933	0.755	0.932	0.910
7600	SEATTLE, WA	1.076	1.123	1.002	1.067	1.065
7610	SHARON, PA	0.936	0.961	0.882	0.932	0.942

MSA Code	Name	Physicians' Own Time	Employee Wages	Office Rent	Malpractice Insurance	Baseline GMEI
7620	SHEBOYGAN, WI	0.899	0.939	0.806	0.637	0.894
7640	SHERMAN-DENISON, TX	0.857	0.909	0.776	0.505	0.855
7680	SHREVEPORT, I.A	1.010	0.962	0.837	0.810	0.971
7720	SHREVEPORT, LA SIOUX CITY, IA-NE	0.967	0.899	0.837	0.667	0.929
7760	SIOUX FALLS, SD	0.845	0.924	0.836	0.689	0.868
7800	SOUTH BEND-MISHAWAKA, IN	0.919	0.919	0.790		0.893
7840	SPOKANE, WA	0.977	0.981	0.871		0.974
7880	SPRINGFIELD, IL	1.002	1.006	0.918		1.001
7920	SPRINGFIELD, MO	0.837	0.888	0.729		0.874
8003	SPRINGFIELD, MA	0.925	0.959	1.100	0.857	0.956
8050	SPRINGFIELD,MA STATE COLLEGE,PA	0.903	0.902	1.062	0.932	0.935
8080	STEUBENVILLE-WEIRTON, OH-WV	0.944	0.964	0.809	0.923	0.938
8120	STOCKTON, CA	1.099	1.093	0.994	1.374	1.089
8160	SYRACUSE, NY	0.979	0.974	0.879	0.966	0.969
8200	TACOMA, WA	1.080	1.041	0.887	1.067	1.041
8240	TALLAHASSEE, FL	0.847	0.873	0.859	. 1.110	0.888
8280	TAMPA-ST. PETERSBURG-CLEAR, FL	0.877	0.901	0.904	1.110	0.913
8320	TERRE HAUTE, IN	0.882	0.851	0.721	0.518	0.855
8360	TEXARKANA, TX-TEXARKANA, AR	0.813	0.901	0.716	0.505	0.824
8400	TOLEDO, OH TOPEKA, KS TRENTON, NJ TUCSON, AZ TULSA, OK TUSCALOOSA, AL TYLER, TX	0.964	1.048	0.918	0.923	0.975
8440	TOPEKA, KS	0.838	0.958	0.847		0.875
8480	TRENTON, NU	1.132	1.033	1.329		1.122
8520	TUCSON, AZ	0.947	0.913	1.084		0.981.
8560	TULSA, OK	0.920	0.961	0.947		0.918
8600	TUSCALOOSA, AL	0.837	0.916	0.768	0.826	0.863
8640	TYLER, TX	0.938	0.899	0.893		0.911
8680	UTICA-ROME, NY	0.939	0.907		0.966	0.926
8720	VALLEJO-FAIRFIELD-NAPA, CA		1.099	1.321	1.374	1.062
8725	VANCOUVER, WA	1.037	0.997	0.900		1.012
8750	VICTORIA, TX	0.906	0.867	1.090	0.505	0.910
8760	VINELAND-MILLVILLE-BRIDGETON, N	0.930	0.960	1.067	1.156	0.972
8780	VISALIA-TULARE-PORTERVILLE, CA	1.004	0.958	1.068	1.374	1.024
8800	WACO, TX	0.922	0.869	0.717	0.505	0.878
8840	WASHINGTON, D C -MD-VA	1.236	1.165	1.374	0.924	1.191
8920	WATERLOO-CEDAR FALLS, IA	0.937	0.967	0.932	0.667	0.935
8940	WAUSAU, WI	0.963	0.938	0.787	0.637	0.926
8960	WEST PALM BEACH-BOCA RATON-DELR	0.992	0.935	0.983	1.110	0.990
9000	WHEELING, WV-OH	0.960	0.931	0.790	0.690	0.927
9040	WICHITA, KS	0.907	0.992	0.903	0.758	0.924
9080	WICHITA FALLS, TX	0.876	0.872	0.805	0.505	0.863
9140	WILLIAMSPORT, PA	0.913	0.917	0.803	0.932	0.914
9160 9200	WILMINGTON, DE-NU-MD	1.171	1.060	1.177	0.665	1.103
	WILMINGTON, NC	0.876	0.904	0.757	0.378	0.856
9243 9260	WORCESTER-FITCHBURG-LEOMINSTER,	0.961	0.970	1.141	0.857	0.982
9280	YAKIMA, WA	1.031	0.951	0.920	1.067	1.004
9320	YORK, PA	0.912	0.946	0.896	0.932	0.929
9340	YOUNGSTOWN-WARREN, OH	0.965	0.995	0.800	0.923	0.954
9901	YUBA CITY, CA Alabama	1.026 0.893	1.041	0.879 0.580	1.374	1.028
9901	Alaska Alaska	1.378	0.862 1.446	1.399	0.826 1.045	0.864 1.322
9904	Arizona	0.932	0.904	0.814	1.258	0.942
9905	Arkansas	0.828	0.904	0.606	0.303	0.796
9906	California	0.962	0.820	1.010	1.374	0.798
7700	CALALULIILU	0.902	0.919	1.010	1.0/4	0.770

MSA		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
9908	Colorado	0.858	0.895	0.894	0.685	0.877
9909	Connecticut	0.944	0.974	1.118	0.949	0.976
9910	Delaware	0.964	0.905	0.798	0.665	0.925
9912	Florida	0.854	0.839	0.654	1.110	0.863
9913	Georgia	0.818	0.831	0.629	0.753	0.820
9915	Hawaii	0.962	1.023	1.231	1.028	1.010
9916	Idaho	0.859	0.895	0.846	0.891	0.884
9917	Illinois	0.896	0.909	0.751	1.140	0.910
9918	Indiana	0.898	0.897	0.716	0.518	0.870
9919	Iowa	0.848	0.878	0.743	0.667	0.851
9920	Kansas -	0.776	0.852	0.685	0.758	0.807
9921	Kentucky	0.880	0.873	0.660	0.668	0.859
9922	Louisiana	0.863	0.893	0.596	0.810	0.853
9923	Maine	0.778	0.862	0.866	0.718	0.827
9924	Maryland	0.933	0.941	0.834	0.845	0.927
9925	Massachusetts	0.928	0.959	1.049	0.857	0.952
9926	Michigan	0.952	0.961	0.764	1.141	0.949
9927	Minnesota	0.897	0.879	0.757	0.749	0.884
9928	Mississippi	0.837	0.823	0.618	0.652	0.822
9929	Missouri	0.782	0.831	0.645	1.181	0.826
9930	Montana	0.850	0.914	0.815	0.720	0.869
9931	Nebraska	0.803	0.828	0.682	0.436	0.799
9932	Nevada	0.938	1.022	1.064	1.147	0.985
9933	New Hampshire	0.793	0.882	1.081	0.603	0.856
9935	New Mexico	0.915	0.883	0.748	0.769	0.895
9936	New York	0.907	0.902	0.831	0.966	0.914
9937	North Carolina	0.820	0.852	0.705	0.378	0.812
9938	North Dakota	0.838	0.869	0.735	0.690	0.845
9939 9940	Ohio	0.876	0.934	0.752 0.647	0.923	0.891
9940	Oklahama	0.860 0.895	0.859 0.954	0.647	0.517 0.953	0.836 0.930
9942	Oregon Pennsylvania	0.906	0.921	0.777	0.932	0.930
9944	Rhode Island	1.014	0.921	0.777	0.736	0.980
9945	South Carolina	0.862	0.845	0.631	0.449	0.829
9946	South Dakota	0.782	0.811	0.686	0.689	0.800
9947	Tennessee	0.848	0.840	0.644	0.408	0.820
9948	Texas	0.840	0.844	0.672	0.442	0.821
9949	Utah	0.977	0.895	0.903	0.741	0.021
9950	Vermont	0.747	0.865	0.897	0.534	0.804
9951	Virginia	0.854	0.867	0.717	0.532	0.842
9953	Washington	0.936	0.979	0.910	1.067	0.956
9954	West Virginia	0.839	0.893	0.701	0.690	0.845
9955	Wisconsin	0.842	0.907	0.726	0.637	0.849
9956	Wyoming	0.904	0.953	0.742	0.642	0.892
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Note: State values shown are for rural areas.

By MSA and Rural Area of States:

Ordered by Baseline GMEI Value

MSA		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
380	ANCHORAGE, AK	1.487	1.426	1.179	1.045	1.354
9902	Alaska	1.378	1.446	1.399	1.045	1.322
5600	NEW YORK, NY	1.237	1.245	1.578	1.865	1.279
5380	NASSAU-SUFFOLK, NY	1.245	1.079	1.541	2.134	1.269
7400	SAN JOSE, CA	1.191	1.225	1.719	1.374	1.240
4480	LOS ANGELES-LONG BEACH, CA	1.238	1.185	1.449	1.374	1.229
7360	SAN FRANCISCO, CA	1.151	1.259	1.730	1.374	1.224
2160	DEIROIT, MI	1.249	1.205	1.046	1.779	1.216
360	ANAHETM-SANTA ANA,CA	1.184	1.126	1.618	1.374	1.209
1163	BRIDGEPORT-STAMFORD-NORWALK-DAN	1.227	1.081	1.412	1.249	1.196
8840	WASHINGTON, D C -MD-VA	1.236	1.165	1.374	0.924	1.191
57 7 5	OAKLAND, CA	1.113	1.249	1.580	1.374	1.186
1600	CHICAGO, IL	1.175	1.155	1.193		1.184
5015	MIDDLESEX-SOMERSET-HUNTERDON, N	1.164	1.093	1.452	1.156	1.162
5640	NEWARK, NJ	1.196	1.109	1.218	1.156	1.156
875	BERGEN-PASSAIC, NU	1.123	1.068	1.578	1.156	1.150
6000	OXNARD-VENTURA, CA	1.135	1.066	1.384	1.374	1.147
7120	SALINAS-SEASIDE-MONTEREY, CA	1.148	1.055	1.210	1.374	1.133
5000	MIAMI-HIALFAH, FL	1.148	1.019	1.087	1.665	1.130
5190	MONMOUTH-OCEAN, NU	1.165	0.971	1.305	1.156	1.128
2640	FLINT, MI	1.140	1.167	0.819	1.779	1.126
8480	TRENTON, NU	1.132	1.033	1.329	1.156	1.122
4120	LAS VEGAS, NV	1.146	1.053	1.223	1.147	1.120
7320	SAN DIEGO, CA	1.111	1.013	1.326	1.374	1.119
6920	SACRAMENTO, CA	1.112	1.116	1.171	1.374	1.119
7480	SANTA BARBARA-SANTA MARIA-LOMPO	1.093	1.030	1.370	1.374	1.117
3640	JERSEY CITY, NJ	1.142	1.134	1.081	1.156	1.116
6780	RIVERSIDE-SAN BERNARDINO,CA	1.105	1.080	1.177	1.374	1.110
6720	RENO, NV	1.054	1.068	1.509	1.147	1.105
9160	WILMINGTON, DE-NU-MD	1.171	1.060	1.177	0.665	1.103
7500	SANTA ROSA-PETALUMA, CA	1.052	1.081	1.362	1.374	1.102
680	BAKERSFIELD, CA	1.112	1.053	1.106		1.102
7485	SANTA CRUZ, CA	1.023	1.039	1.548	1.374	1.100
6160	PHILADELPHIA, PA-NU	1.076	1.057	1.045	1.749	1.097
6460	POUGHKEEPSIE, NY	1.110	1.008	1.299	0.966	1.092
8120	STOCKTON, CA	1.099	1.093	0.994	1.374	1.089
1150	BREMERTON, WA	1.146	1.022	1.013	1.067	1.088
6960	SAGINAW-BAY CITY-MIDLAND, MI	1.142	1.106	0.837	1.141	1.083
6690	REDDING, CA	1.101	0.998	1.010	1.374	1.076
1123	BOSTON-LOWELL-BROCKTON-LAWRENCE	1.029	1.043	1.556	0.857	1.076
3965	LAKE COUNTY, IL	1.045	1.102	1.251	1.140	1.076
720	BALTIMORE, MD	1.110	1.074	1.042	0.972	1.074
5910	OLYMPIA, WA	1.097	1.045	1.046	1.067	1.068
3690	JOLIET, IL	1.051	1.028	1.226	1.140	1.065
5170	MODESTO, CA	1.066	1.005	1.062	1.374	1.065
7600	SEATTLE, WA	1.076	1.123	1.002	1.067	1.065
4940	MERCED, CA	1.088	0.980	0.991	1.374	1.064
8720	VALLEJO-FAIRFIELD-NAPA, CA	0.981	1.099	1.321	1.374	1.062
6840	ROCHESTER, NY	1.096	1.046	1.019	0.966	1.059
3320	HONOLULU, HI	1.025	1.058	1.278	1.028	1.055
560	ATLANIIC CITY, NU	1.069	0.973	1.115	1.156	1.055
3520	JACKSON, MI	1.097	1.052	0.853	1.141	1.052
1350	CASPER, WY	1.111	0.957	1.156	0.642	1.051
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MSA		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
3283	HARTFORD-MIDDLETOWN-NEW BRITAIN	1.033	1.030	1.239	0.999	1.049
		1.098	1.030	0.779	1.141	1.049
6120	PEORTA TI.	1.046	1.096	1.007	1.140	1.049
2840	BATTLE CREEK, MI PEORIA, IL FRESNO, CA RACINE, WI TACOMA, WA ORANGE COUNTY, NY ANN ARBOR, MI PUEBLO, CO RICHIAND-KENNEWICK, WA	1.032	1.022	1.010	1.374	1.043
6600	RACTNE. WI	1.123	1.056	0.884		1.042
8200	TACOMA, WA	1.080	1.041	0.887		1.041
5950	ORANGE COUNTY, NY	0.993	0.946	1.152	1.651	1.041
440	ANN ARBOR. MI	1.012	1.051	1.158		1.040
6560	ANN ARBOR, MI PUEBLO, CO	1.144	0.942			
6740	RICHLAND-KENNEWICK, WA	1.007	1.073		1.067	
5120	MINNEAPOLIS-ST PAUL, MN-WI KALAMAZOO, MI DENVER, CO YUBA CITY, CA CLEVELAND, OH	1.070	1.039			
3720	KALAMAZOO, MI	1.072	1.039	0.862	1.141	
2080	DENVER, CO	1.079	1.058	1.024	0.685	1.037
9340	YUBA CITY, CA	1.026	1.041	0.879		1.028
1680	CLEVELAND, OH	1.076	1.074	0.812	0.923	1.027
6200	PRODUKA, AZ	1.012	0.945	1.134	1.258	1.027
2680	FORT LAUDERDALE-HOLLYWOOD-POMPA	0.974	0.951	1.086	1.665	1.025
8780	VISALIA-TULARE-PORTERVILLE, CA		0.958	1.068	1.374	1.024
5523	NEW LONDON-NORWICH, CT-RI	0.989	0.988	1.188	1.149	1.021
5040	MIDLAND, TX	1.090	0.984	1.016		1.020
5483	NEW HAVEN-WEST HAVEN-WATERBURY-		0.995	1.270		1.018
5345	NAPLES, FL	1.041	0.891	1.058		1.018
2960	GARY-HAMMOND, IN	1.040	1.118	0.972	0.653	1.017
4040	LANSING-EAST LANSING, MI	1.006	1.078			1.013
8725 62 8 0	VANCOUVER, WA	1.037 1.027	0.997			1.012
9915	PITTSBURGH, PA Hawaii	0.962	1.032 1.023			1.010 1.010
5700	NIAGARA FALLS, NY	1.069	0.968		0.966	1.010
620	AURORA-ELGIN, IL	0.955	1.009	1.219		1.009
1145	BRAZORIA, TX	1.102	0.960	0.893	0.505	1.009
6483	PROVIDENCE-PAWTUCKET-WOONSOCKET	1.037	0.958	1.064	0.736	1.006
3360	HOUSTON, TX	1.056	1.098	0.796	0.657	1.004
9260	YAKIMA, WA	1.031	0.951	0.920	1.067	1.004
3000	CRAND RAPIDS, MI	1.012	0.985	0.929	1.141	1.004
5560	NEW ORLEANS, LA	0.978	1.001	1.021		1.002
7880	SPRINGFIELD, IL	1.002	1.006	0.918	1.140	1.001
5080	MILWAUKEE, WI	1.031	1.074	0.929	0.637	1.000
160	ALBANY-SCHENECTADY-TROY, NY	1.023	0.971	0.941	0.966	1.000
-860	BELLINGHAM, WA	0.987	1.010	1.010	1.067	0.999
9906	California	0.962	0.979	1.010	1.374	0.998
7040	ST LOUIS, MO-IL	0.971	0.995	0.916	1.418	0.998
5320	MUSKEGON, MI	1.030	0.997	0.759	1.141	0.997
1280	BUFFALO, NY	1.036	0.973	0.844	0.966	0.996
6440	PORTLAND, OR	0.972	1.082	1.002	0.953	0.995
1040	BLOOMINGTON-NORMAL, IL	1.007	0.966	0.896	1.140	0.994
1620	CHICO, CA	0.965	0.970	0.970	1.374	0.994
1960	DAVENPORT-ROCK ISLAND-MOLINE, I	1.024	1.011	0.954	0. 6 67	0.991
8960	WEST PALM BEACH-BOCA RATON-DELR	0.992	0.935	0.983	1.110	0.990
7490	SANTA FE, NM	0.981	0.948	1.177	0.769	0.988
9932 6820	Nevada	0.938	1.022 0.975	1.064	1.147	0.985
9243	ROCHESTER, MN WORCESTER-FITCHBURG-LEOMINSTER,	1.018 0.961	0.975	0.918 1.141	0.749 0.857	0.983 0.982
8520	TUCSON, AZ	0.947	0.970	1.084	1.258	0.982
2000	DAYTON-SPRINGFIELD, OH	1.017	0.913	0.786	0.923	0.981
2000	MILLON DITURBUILD, OIL	T.OT/	0.770	0.700	0.743	0.701

MSA Code	Name	Physicians' Own Time	Employee Wages	Office Rent	Malpractice Insurance	Baseline GMEI
3850	KOKOMO, IN	1.061	0.957	0.822	0.518	0.980
9944	Rhode Island	1.014	0.920	0.992	0.736	0.980
6323	PITTSFIELD, MA	0.980	0.931	1.077	0.857	0.979
5800	ODESSA, TX	1.032	0.921	1.008	0.505	0.978
6880	ROCKFORD, IL	0.966	0.975	0.915	1.140	0.976
9909	Connecticut	0.944	0.974	1.118	0.949	0.976
1580	CHEYENNE, WY	1.008	0.968	0.957	0.642	0.975
1480	CHARLESTON, WV	0.988	0.978	1.017	0.690	0.975
8400	TOLEDO, OH	0.964	1.048	0.918	0.923	0.975
7840	SPOKANE, WA	0.977	0.981	0.871	1.067	0.974
8760	VINELAND-MILLVILLE-BRIDGETON, N	0.930	0.960	1.067	1.156	0.972
7680	SHREVEPORT, LA	1.010	0.962	0.837	0.810	0.971
240	ALIENTOWN-BETHLEHEM, PA-NU	0.970	0.992	0.925	0.932	0.970
2040	DECATUR, IL	0.956 0.979	1.001 0.974	0.871 0.879	1.140 0.966	0.970
8160 3240	SYRACUSE, NY HARRISBURG-LEBANON-CARLISE, PA	0.949	1.015	0.879	0.932	0.969 0.968
6680	READING, PA	0.980	0.927	0.929	0.932	0.966
80	AKRON, OH	0.973	1.004	0.853	0.923	0.965
5403	NEW BEDFORD-FALL RIVER-ATTLEBOR	0.965	0.945	0.992	0.857	0.963
845	BEAVER COUNTY, PA	0.957	1.040	0.846	0.932	0.962
5960	ORLANDO, FL	0.956	0.884	0.979		0.962
7510	SARASOTA, FL	0.936	0.878	1.086	1.110	0.962
2700	FORT MYERS-CAPE CORAL, FL	0.953	0.855	1.032	1.110	0.961
3200	HAMILTON-MIDDLETOWN, OH	0.962	0.992	0.887	0.923	0.961
2120	DES MOINES, IA	0.988	0.965	0.925	0.667	0.961
3800	KENOSHA, WI	0.946	1.104	0.945	0.637	0.961
7160	SALT LAKE CTTY-OGDEN, UT	0.975	0.964	0.944	0.741	0.960
2240	DULUTH, MN-WI	0.984	0.978	0.853	0.749	0.957
1125	BOULDER-LONGMONT, CO	0.948	0.943	1.109	0.685	0.957
760	BATON ROUGE, LA	0.964	0.965	0.926	0.810	0.956
8003	SPRINGFIELD, MA	0.925	0.959	1.100	0.857	0.956
9953	Washington	0.936	0.979	0.910	1.067	0.956
2710	FORT PIERCE, FL	0.928	0.900	1.032	1.110	0.955
1640 9320	CINCINNATI, OH-KY-IN	0.956	1.034 0.995	0.790	0.923	0.954
9925	YOUNGSTOWN-WARREN, OH Massachusetts	0.965 0.928	0.959	0.800 1.049	0.923 0.857	0.954 0.952
1920	DALLAS, TX	0.983	1.022	0.863	0.505	0.952
4440	LORAIN-ELYRIA, OH	0.951	0.989	0.840	0.923	0.950
3480	INDIANAPOLIS, IN	0.990	0.999	0.841	0.518	0.950
840	BEAUMONT-PORT ARTHUR, TX	0.991	0.959	0.896	0.505	0.949
9926	Michigan	0.952	0.961	0.764	1.141	0.949
3760	KANSAS CITY, MO-KS	0.913	0.988	0.885	1.181	0.948
870	BENTON HARBOR, MI	0.926	0.968	0.862	1.141	0.948
200	ALBUQUERQUE, NM	0.939	0.941	1.011	0.769	0.946
9949	Utah	0.977	0.895	0.903	0.741	0.946
3600	JACKSONVILLE, FL	0.929	0.915	0.915	1.110	0.945
2335	ELMIRA, NY	0.953	0.917	0.868	0.966	0.945
3880	LAFAYETTE, LA	0.948	0.937	0.926	0.810	0.943
7610	SHARON, PA	0.936	0.961	0.882	~ 0.932	0.942
1320	CANTON, OH	0.965	0.952	0.755	0.923	0.942
9904	Arizona	0.932	0.904	0.814	1.258	0.942
2975 520	GLENS FALLS, NY	0.946	0.902	0.896	0.966	0.942
7080	ATLANTA, GA SALEM, OR	0.901	0.999	1.083	0.753	0.942
7000	Undidity UN	0.895	1.005	0.997	0.953	0.941

MSA		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance .	GMEI
1840	COLUMBUS, OH	0.931	0.988	0.859	0.923	0.941
3080	GREEN BAY, WI	0.980	0.971	0.787	0.637	0.941
960	BINCHAMION, NY	0.947	0.927	0.843	0.966	0.940
4900	MELBOURNE-TTTUSVILLE, FL	0.917	0.913	0.934	1.110	0.940
4890	MEDFORD, OR	0.895	0.955	1.059	0 .95 3	0.940
1080	BOISE CITY, IDAHO	0.901	0.963	1.045	0.891	0.939
8080	STEUBENVILLE-WEIRTON, OH-WV	0.944	0.964	0.809	0.923	0.938
2360	ERIE, PA	0.918	0.947	0.951	0.932	0.938
2760	FORT WAYNE, IN	0.977	0.979	0.809	0.518	0.936
8050	STATE COLLEGE, PA	0.903	0.902	1.062	0.932	0.935
3180	HAGERSTOWN, MD	0.932	0.975	0.859	0.845	0.935
8920	WATERLOO-CEDAR FALLS, IA	0.937	0.967	0.932	0.667	0.935
1360	CEDAR RAPIDS, IA	0.944	0.943	0.929	0.667	0.934
6453	PORTSMOUTH-DOVER-ROCHESTER, NH	0.898	0.923	1.210	0.603	0.934
2400	EUGENE-SPRINGFIELD, OR	0.870	0.990	1.067	0.953	0.932
2650	FLORENCE, AL	0.981	0.892	0.717	0.826	0.932
3680	JOHNSTOWN, PA	0.937	0.942	0.803	0.932	0.931
880	BILLINGS, MT	0.917	0.942	1.007	0.720	0.931
2020 .	DAYTONA BEACH, FL	0.911	0.848	0.969	1.110	0.931
9941	0regon	0.895	0.954	0.970	0.953	0.930
3440	HUNTSVILLE, AL	0.962	0.889	0.798	0.826	0.930
7720	SIOUX CITY, IA-NE	0.967	0.899	0.837	0.667	0.929
3040	GREAT FALLS, MT	0.950	0.913	0.868	0.720	0.929
9280	YORK, PA	0.912	0.946	0.896	0.932	0.929
9924	Maryland	0.933	0.941	0.834	0.845	0.927
4520	LOUISVILLE, KY-IN	0.968	0.943	0.749	0.668	0.927
9000	WHEELING, WV-OH	0.960	0.931	0.790	0.690	0.927
4763	MANCHESTER-NASHUA, NH	0.876	0.927	1.248	0.603	0.927
8940	WAUSAU, WI	0.963	0.938	0.787	0.637	0.926
8680	UTICA-ROME, NY	0.939	0.907	0.781	0.966	0.926
460	APPLETON-OSHKOSH-NEFNAH, WI	0.952	0.968	0.787	0.637	0.925
4000	LANCASTER, PA	0.883	0.953	0.994	0.932	0.925
9910	Delaware	0.964	0.905	0.798	0.665	0.925
3740	KANKAKEE, IL	0.882	0.969	0.862	1.140	0.924
9040	WICHITA, KS	0.907	0.992	0.903	0.758	0.924
400	ANDERSON, IN	0.981	0.931	0.748	0.518	0.924
3620	JANESVILLE-BELOIT, WI	0.945	0.920	0.871	0.637	0.923
4720	MADISON, WI	0.909	0.987	0.942	0.637	0.922
1720	COLORADO SPRINGS, CO	0.939	0.899	0.900	0.685	0.922
2920	GALVESTON-TEXAS CITY, TX	0.928	1.036	0.834	0.505	0.921
1010	BISMARK, ND	0.934	0.923	0.871	0.690	0.920
2330	ELKHART-GOSHEN, IN	0.964	0.938	0.787	0.518	0.920
2320	EL PASO, TX	0.978	0.883	0.783	0.505	0.918
8560	TULSA, OK	0.920	0.961	0.947	0.517	0 .918
6520	PROVO-OREM, UT	0.944	0.877	0.827	0.741	0.917
6403	PORTLAND, ME	0.855	0.911	1.219	0.718	0.916
2670	FORT COLLINS-LOVELAND, CO	0.894	0.909	1.036	0.685	0.915
1000	BIRMINGHAM, AL	0.924	0.947	0.761	0.826	0.914
9140	WILLIAMSPORT, PA	0.913	0.917	0.803	0.932	0.914
9936	New York	0.907	0.902	0.831	0.966	0.914
5720	NORFOLK-VIRGINIA BEACH-NEWPORT	0,902	0.927	0.973	0.665	0.914
8280	TAMPA-ST. PETERSBURG-CLEAR, FL	0.877	0.901	0.904	1.110	0.913
220	ALEXANDRIA, LA	0.942	0.901	0.738	0.810	0.913
2290	EAU CLAIRE, WI	0.952	0.895	0.781	0.637	0.913

MSA Code	Name	Physicians' Own Time	Employee Wages	Office Rent	Malpractice Insurance	Baseline GMEI
6980	ST CLOUD, MN	0.925	0.881	0.875	0.749	0.913
3350	HOUMA-THIBODAUX, LA	0.906	0.959	0.821	0.810	0.912
2440	EVANSVILLE, IN-KY	0.944	0.936	0.809	0.518	0.911
8640	TYLER, TX	0.938	0.899	0.893	0.505	0.911
8750	VICTORIA, TX	0.906	0.867	1.090	0.505	0.910
4320	LIMA, OH	0.900	0.939	0.800	0.923	0.910
7560	SCRANTON-WILKES BARRE, PA		0.933	0.755	0.932	0.910
9917	Illinois	0.896	0.909	0.751	1.140	0.910
9942	Pennsylvania	0.906	0.921	0.777	0.932	0.908
3400	HUNTINGTON-ASHLAND, WV-KY-OH	0.911	0.935	0.841	0.690	0.906
6080	PENSACOLA, FL	0.891	0.868	0.818	1.110	0.906
1260	BRYAN-COLLEGE STATION, TX	0.912	0.837	1.054	0.505	0.905
5240	MONIGOMERY, AL	0.914	0.936	0.733	0.826	0.904
4800	MANSFIELD, OH	0.898	0.957	0.723	0.923	0.903
6015	PANAMA CITY, FL	0.918	0.816	0.732	1.110	0.903
6760	RICHMOND-PETERSBURG, VA	0.914	0.957	0.884	0.452	0.903
1140	BRADENTON, FL	0.843	0.877	1.004	1.110	0.902
3980	LAKELAND-WINTER HAVEN, FL	0.882	0.861	0.825	1.110	0.901
5360	NASHVILLE, TN	0.912	0.922	0.931	0.408	0.899
1880	CORPUS CHRISTI, TX	0.905	0.916	0.918	0.505	0.899
2900	GAINESVILLE, FL	0.870	0.854	0.872	1.110	0.898
120	ALBANY, GA	0.920	0.883	0.755		0.897
3960	LAKE CHARLES, LA	0.899	0.951	0.732	0.810	0.897
5200	MONROE, LA	0.917	0.880	0.735	0.810	0.896
2520	FARGO-MOORHEAD, ND-MN	0.889	0.925	0.871	0.690	0.896
920	BILOXI-GULFPORT, MS	0.919	0.929	0.733	0.652	0.896
9935	New Mexico	0.915	0.883	0.748	0.769	0.895
6800	ROANOKE, VA	0.916	0.932	0.789	0.532	0.894
7620 7800	SHEBOYGAN, WI	0.899	0.939	0.806	0.637	0.894
1303	SOUTH BEND-MISHAWAKA, IN	0.919	0.919	0.790	0.518	0.893
5280	BURLINGTON, VT	0.843 0.944	0.896 0.895	1.188 0.702	0.534 0.518	0.893 0.893
3710	MUNCIE, IN JOPLIN, MO	0.900	0.842	0.702	1.181	0.893
5990	OVENSBORO, KY	0.900	0.842	0.686	0.668	0.893
1400	CHAMPAIGN-URBANA-RANTOUL, IL		0.927	0.871	1.140	0.892
9956	Wyoming	0.904	0.953	0.742	0.642	0.892
6640	RALEIGH-DURHAM, NC	0.898	0.951	0.907	0.378	0.892
640	AUSTIN, TX	0.874	0.927	0.988	0.505	0.891
5880	OKLAHOMA CITY, OK	0.877	0.962	0.919	0.517	0.891
1900	CUMBERLAND, MD-W VA	0.884	0.946	0.738	0.845	0.891
9939	Ohio	0.876	0.934	0.752	0.923	0.891
2750	FORT WALTON BEACH, FL	0.890	0.860	0.688	1.110	0.890
450	ANNISTON, AL	0.913	0.884	0.679	0.826	0.889
2800	FORT WORTH-ARLINGTON, TX	0.893	0.933	0.863	0.505	0.888
5920	OMAHA, NE-IA	0.899	0.947	0.846	0.436	0.888
8240	TALLAHASSEE, FL	0.847	0.873	0.859	1.110	0.888
2200	DUBUQUE, IA	0.875	0.928	0.856	0.667	0.886
3060	GREELEY, CO	0.872	0.897	0.897	0.685	0.886
6020	PARKERSBURG-MARIETTA, WV-OH	0.893	0.901	0.786	0.690	0.885
1240	BROWNSVILLE-HARLINGEN, TX	0.922	0.859	0.795	0.505	0.885
7240	SAN ANTONIO, TX	0.891	0.919	0.858	0.505	0.884
4400	LITTLE ROCK-NORTH LITTLE ROCK	•	0.938	0.860	0.303	0.884
4280	LEXINGTON-FAYETTE, KY	0.869	0.919	0.877	0.668	0.884
9927	Minnesota	0.897	0.879	0.757	0.749	0.884

MSA Code	Name	Physicians' Own Time	Employee Wages	Office Rent	Malpractice Insurance	Baseline GMEI
1520	CHARLOTTE-GASTONIA-ROCK HILL, N	0.907	0.924	0.831	0.378	0.884
9916	Idaho	0.859	0.895	0.846	0.891	0.884
2560	FAYEITEVILLE, NC	0.931	0.910	0.724	0.378	0.883
1440	CHARLESTON, SC	0.912	0.903	0.781	0.449	0.882
1560	CHATTANOOGA, TN-GA	0.895	0.927	0.849	0.408	0.882
3500	IOWA CITY, IA	0.839	0.935	0.973	0.667	0.881
2985	GRAND FORKS, ND	0.871	0.911	0.827	0.690	0.879
3120	GREENSBORO-WINSTON-SALEM-HIGH P	0.910	0.910	0.793	0.378	0.879
3560	JACKSON, MS	0.848	0.926	0.932	0.652	0.879
8800	WACO, TX	0.922	0.869	0.717	0.505	0.878
9908	Colorado	0.858	0.895	0.894	0.685	0.877
1950	DANVILLE, VA	0.914	0.858	0.751	0.532	0.877
5160	MOBILE, AL	0.856	0.894	0.827	0.826	0.877
3660	JOHNSON CITY-KINGSPORT-BRISTOL,	0.920	0.906	0.710	0.408	0.876
4920	MEMPHIS, TN-AR-MS	0.880	0.960	0.827	0.408	0.876
7520	SAVANNAH, GA	0.863	0.914	0.796	0.753	0.876
600	AUGUSTA, GA-SC	0.876	0.875	0.781	0.753	0.875
8440	TOPEKA, KS	0.838	0.958	0.847	0.758	0.875
6025	PASCAGOULA, MS	0.866	0.925	0.800	0.652	0.874
7920	SPRINGFIELD, MO	0.837	0.888		1.181	0.874
4100	LAS CRUCES, NM		0.833	0.802	0.769	0.874
4420	LONGVIEW-MARSHALL, TX	0.870	0.902	0.882	0.505	0.873
2880	GADSDEN, AL	0.883	0.922	0.628	0.826	0.873
1760	COLUMBIA, SC	0.876	0.916	0.858	0.449	0.873
3580	JACKSON, TN	0.910	0.874	0.768	0.408	0.873
320	AMARTLLO, TX	0.889	0.901	0.779	0.505	0.872
2180	DOTHAN, AL	0.862	0.866	0.790	0.826	0.871
280	ALTOONA, PA	0.827	0.923	0.825	0.932	0.871
6660	RAPID CITY, SD	0.885	0.847	0.770	0.689	0.871
9918	Indiana	0.898	0.897	0.716	0.518	0.870
9930	Montana	0.850	0.914	0.815	0.720	0.869
7760	SIOUX FALLS, SD	0.845	0.924	0.836	0.689	0.868
3160	GREENVILLE-SPARTANBURG, SC	0.899	0.882	0.751	0.449	0.868
1300	BURLINGTON, NC	0.863	0.907	0.916	0.378	0.867
3605	JACKSONVILLE, NC	0.922	0.842	0.720	0.378	0.867
3870	LA CROSSE, WI	0.840	0.884	0.928	0.637	0.867
1540	CHARLOTTESVILLE, VA	0.827	0.928	0.982	0.532	0.867
1740	COLUMBIA, MO	0.803	0.869	0.852	1.181	0.866
4200	LAWTON, OK	0.880	0.903	0.749	0.517	0.865
9901	Alabama	0.893	0.862	0.580	0.826	0.864
2655	FLORENCE, SC	0.902	0.881	0.697	0.449	0.864
9080	WICHITA FALLS, TX	0.876	0.872	0.805	0.505	0.863
9912	Florida	0.854	0.839	0.654	1.110	0.863
8600	TUSCALOOSA, AL	0.837	0.916	0.768	0.826	0.863
40	ABILENE, TX	0.883	0.819	0.849	0.442	0.860
381 0	KILLEEN-TEMPLE, TX	0.876	0.870	0.773	0.505	0.859
9921	Kentucky	0.880	0.873	0.660	0.668	0.859
4680	MACON-WARNER ROBINS, GA	0.829	0.917	0.784	0.753	0.857
9200	WILMINGTON, NC	0.876	0.904	0.757	0.378	0.856
9933	New Hampshire	0.793	0.882	1.081	0.603	0.856
7640	SHERMAN-DENISON, TX	0.857	0.909	0.776	0.505	0.855
3840	KNOXVILLE, IN	0.867	0.900	0.781	0.408	0.855
8320	TERRE HAUTE, IN	0.882	0.851	0.721	0.518	0.855
405	ANDERSON, SC	0.891	0.869	0.685	0.449	0.855

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MSA	Nome	Physicians' Own Time	Employee	Office Pont	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
4360	LINCOLN, NE	0.852	0.879	0.859	0.436	0.853
9922	Louisiana	0.863	0.893	0.596	0.810	0.853
9919	Iowa	0.848	0.878	0.743	0.667	0.851
3920	LAFAYETTE, IN	0.838	0.864	0.869	0.518	0.850
9955	Wisconsin	0.842	0.907	0.726	0.637	0.849
7000	ST JOSEPH, MO	0.799	0.873	0.698	1.181	0.848
733	BANGOR, ME	0.806	0.849	0.919	0.718	0.846
9954	West Virginia	0.839	0.893	0.701	0.690	0.845
4080	LAREDO, TX	0.871	0.821	0.733	0.505	0.845
9938	North Dakota	0.838	0.869	0.735	0.690	0.845
5790	OCALA, FL	0.794	0.848	0.761	1.110	0.844
500	ATHENS, GA	0.823	0.855	0.781	0.753	0.843
9951	Virginia	0.854	0.867	0.717	0.532	0.842
2340	ENID, OK	0.811	0.909	0.871	0.517	0.842
1660	CLARKSVILLE-HOPKINSVILL, IN-KY	0.837	0.868	0.830	0.408	0.839
4640	LYNCHBURG, VA	0.822	0.884	0.809	0.532	0.838
9940	Oklahama	0.860	0.859	0.647	0.517	0.836
2720	FORT SMITH, AR-OK	0.849	0.898	0.724	0.303	0.833
7200	SAN ANGELO, TX	0.815	0.852	0.855	0.505	0.833
480	ASHEVILLE, NC	0.834	0.898	0.757	0.378	0.832
1800	COLUMBUS, GA-AL	0.816	0.861	0.704	0.753	0.832
4150	LAWRENCE, KS	0.772	0.848	0.935	0.758	0.832
1020	BLOOMINGTON, IN	0.802	0.907	0.806	0.518	0.829
9945	South Carolina	0.862	0.845	0.631	0.449	0.829
9923	Maine	0.778	0.862	0.866	0.718	0.827
9929	Missouri	0.782	0.831	0.645	1.181	0.826
8360	TEXARKANA, TX-TEXARKANA, AR	0.813	0.901	0.716	0.505	0.824
9928	Mississippi	0.837	0.823	0.618	0.652	0.822
9948	Texas	0.840	0.844	0.672	0.442	0.821
9947	Tennessee ·	0.848	0.840	0.644	0.408	0.820
9913	Georgia	0.818	0.831	0.629	0.753	0.820
6240	PINE BLUFF, AR	0.829	0.875	0.717	0.303	0.817
4600	LUBBOCK, TX	0.800	0.869	0.754	0.505	0.816
9937	North Carolina	0.820	0.852	0.705	0.378	0.812
9920	Kansas	0.776	0.852	. 0.685	0.758	0.807
9950	Vermont	0.747	0.865	0.897	0.534	0.804
4243	LEWISTON-AUBURN, ME	0.748	0.837	0.824	0.718	0.803
4880	MCALLEN-EDINBURG-MISSION, TX	0.780	0.821	0.792	0.505	0.802
3290	HICKORY, NC	0.800	0.856	0.694	0.378	0.800
9946	South Dakota	0.782	0.811	0.686	0.689	0.800
9931	Nebraska	0.803	0.828	0.682	0.436	0.799
9905	Arkansas	0.828	0.820	0.606	0.303	0.796
2580	FAYETTEVILLE-SPRINGDALE, AR	0.722	0.842	0.745	0.303	0.757

Note: State values shown are for rural areas.

Table B-3. Alternative CMEIs

By MSA and Rural Area of States:

In Alphabetical Order

4			Occup	Occup	Educ		HCFA		Per	
MSA	Name	Baseline	& Educ Adjust	Adjust Only	Adjust Only	Normanuf Workers	Hospital Wage	All Workers	Capita Income	Overhead Only
			, mjoot	u Ly	CIL.	WOLKELS	wage.	WOLKLIS	HAMIC	any
1	ABILENE, TX	0.860	0.871	0.845	0.854	0.841	0.842	0.827	0.927	0.924
80	AKRON, OH	0.965	0.965	0.977	1.006	0.969	1.006	1.017	0.975	0.980
120	ALBANY, GA	0.897	0.921	0.878	0.878	0.893	0.818	0.908	0.826	0.941
160 200	ALBANY-SCHENECTADY-TROY, NY	1.000 0.946	1.007 0.961	1.003 0.973	1.016 0.966	0.978	0.924	0.983	0.993	0.987
220	ALEUQUERQUE, NM ALEXANDRIA, LA	0.948	0.933	0.908	0.926	0.971 0.878	1.005 0.873	0.946 0.866	0.971 0.802	0.979 0.945
5	ALIENIONN-BETHLEHEM, PA-NU	0.970	0.957	0.987	0.994	0.964	0.873	0.996	1.008	0.943
	ALTOONA, PA	0.871	0.919	0.897	0.908	0.945	0.936	0.934	0.836	0.965
	AMARILLO, TX	0.872	0.885	0.880	0.892	0.901	0.881	0.894	0.943	0.932
5 (1)	ANAHEIM-SANIA ANA, CA	1.209	1.209	1.204	1.219	1.170	1.213	1.157	1.274	1.109
	ANCHURAGE, AK	1.354	1.354	1.351	1.337	1.432	1.359	1.393	1.429	1.089
400	ANDERSON, IN	0.924	0.943	0.952	0.965	0.846	0.866	1.016	0.855	0.934
	ANDERSON, SC	0.855	0.845	0.835	0.795	0.816	0.800	0.818	0.783	0.914
	ANN ARBOR, MI	1.040	1.040	1.070	1.051	1.067	1.137	1.127	1.113	1.033
	ANNISTON, AL	0.889	0.947	0.886	0.895	0.897	0.831	0.865	0.791	0.936
	APPLETON-OSHKOSH-NEENAH, WI	0.925	0.903	0.914	0.942	0.897	0.959	- 0.956	0.937	0.951
	ASHEVILLE, NC	0.832	0.838	0.849	0.817	0.836	0.833	0.824	0.844	0.922
	ATHENS, GA	0.843 0.942	0.889	0.853	0.814	0.845	0.816 0.948	0.822	0.840	0.939
	ATLANTA, CA ATLANTIC CITY, NU	1.055	0.940 1.049	0.966 1.042	0.914 1.070	1.022 1.035	1.017	1.004 1.010	1.032 1.076	0.995 1.017
600	AUGUSTA, CA-SC	0.875	0.871	0.891	0.835	0.873	0.892	0.867	0.867	0.942
620	ALRORA-ELGIN, IL	1.009	1.010	1.016	1.016	1.065	1.056	1.083	1.074	1.034
	ALSTIN, TX	0.891	0.898	0.919	0.887	0.919	0.990	0.904	0.971	0.959
	BAKERSFIELD, CA	1.102	1.117	1.106	1.139	1.091	1.117	1.076	1.002	1.041
720	BALITMORE, MD	1.074	1.054	1.045	1.053	1.048	1.044	1.044	1.041	1.015
733	BANGOR, ME	0.846	0.863	0.840	0.833	0.862	0.881	0.870	0.856	0.952
	BATON ROUGE, LA	0.956	0.943	0.966	0.950	0.995	0.937	1.011	0.955	0.976
	BATTLE CREEK, MI	1.049	1.059	1.048	1.064	1.012	0.982	1.062	0.968	0.996
	BEALMONT-PORT ARTHUR, TX	0.949	0.937	0.942	0.983	0.965	0.928	1.020	0.969	0.954
	BEAVER COUNTY, PA	0.962	0.963	0.994	1.006	1.023	1.003	1.134	0.941	0.985
	BELLINGHAM, WA	0.999	1.030	1.021	1.064	1.032	1.052	1.042	0.935	1.006
870	BENION HARBOR, MI	0.948	0.963	0.973	0.962	0.949	0.902	0.997	0.923	0.988
875	BERGEN-PASSAIC, NU BILLINGS, MI	1.150 0.931	1.150 0.933	1.149 0.930	1.171 0.932	1.137 0.983	1.096 0.958	1.126 0.974	1.288 0.975	1.083 0.976
	BILOXI-GULFPORT, MS	0.896	0.881	0.930	0.862	0.878	0.832	0.974	0.803	0.976
		0.940	0.948	0.976	0.992	0.903	0.917	0.941	0.943	0.969
1000	BIRMINCHAM, AL	0.914	0.913	0.926	0.906	0.954	0.908	0.952	0.906	0.955
1010	BISMARK, ND	0.920	0.967	0.912	1.017	0.932	0.911	0.917	0.992	0.956
	BLOOMINGTON, IN	0.829	0.821	0.856	0.799	0.849	0.902	0.868	0.795	0.937
1040	BLOOMINGTON-NORMAL, IL	0.994	0.995	0.981	0.967	0.980	0.953	0.973	0.979	0.991
	BOISE CITY, IDAHO	0.939	0.931	0.964	0.954	1.008	0.993	0.988	0.992	0.993
	BOSTON-LOWELL-BROCKTON-LAWRENCE		1.088	1.088	1.091	1.104	1.111	1.089	1.181	1.060
1125	BOULDER-LONGMONT, CO	0.957	0.957	0.976	0.984	0.984	1.023	0.976	1.083	0.985
1140	BRADENION, FL	0.902	0.879	0.873	0.866	0.899	0.916	0.888	0.996	0.987
1150	BRAZORIA, TX	1.009	1.009	0.980	1.018	1.018	0.860	1.078	0.962	0.954
	BREMERION, WA	1.088	1.060	1.061	1.086	1.069	0.969	1.117	1.031	1.009
12/0	BRIDGEPORT-STAMFORD-NORWALK-DAN		1.151	1.143	1.148 0.837	1.139 0.805	1.137 0.845	1.138 0.782	1.382	1.072
1240	BROWNSVILLE-HARLINGEN, TX BRYAN-COLLEGE STATION, TX	0.885 0.905	0.891 0.915	0.875 0.886	0.853	0.883	0.845	0.782	0.694 0.832	0.927
	BUFFALO, NY	0.905	0.925	0.000,	1.020	0.961	0.905	0.998	0.963	0.953 0.976
1300	BURLINGTON, NC	0.996	0.889	0.866	0.832	0.830	0.975	0.805	0.963	0.941
	BIRLINGION, VI	0.893	0.910	0.936	0.909	0.896	0.955	0.940	0.953	0.973
	CANTON, OH	0.942	0.933	0.919	0.946	0.916	0.935	0.992	0.915	0.961
		0.7.2			0.7.0					0.702

			Occurp	Occup	Educ		HOFA	, = =	Per	
MSA Codo	Nome	Booline	& Educ	Adjust	Adjust Only	Normanuf Vorkers			Capita	Overhea (
Code	Name	Baseline	Adjust	Only	Only	Workers	Wage	Workers	Income	Only :
1350	CASPER, WY	1.051	1.056	1.019	1.050	1.080	1.015	1.058	1.118	0.991
	CEDAR RAPIDS, IA	0.934	0.951	0.943	0.977	0.939	0.944	0.997	0.988	0.965
	CHAMPAICN-URBANA-RANIOUL, IL	0.892	0.901	0.919	0.866	0.962	0.950	0.948	0.907	0.982
1440	CHARLESTON, SC	0.882	0.859	0.879	0.843	0.873	0.844	0.883	0.819	0.930
1480	CHARLESTON, WV	0.975	1.003	0.990	0.977	1.016	0.976	1.035	0.973	0.981
1520	CHARLOTTE-CASTONIA-ROCK HILL, N		0.900	0.881	0.900	0.906	0.853	0.868	0.909	0.935
1540	CHARLOTTESVILLE, VA	0.867	0.871	0.888	0.846	0.890	0.897	0.874	0.924	0.961
	CHATTANDOGA, TN-GA	0.882	0.878	0.895	0.868	0.908	0.914	0.903	0.858	0.939
	CHEYENNE, WY	0.975	0.979	0.962	0.973	0.999	•	0.974		0.970
	CHICAGO, IL	1.184	1.184	1.171	1.172	1.205	1.182	1.186	1.171	1.089
1620	CHICO, CA	0.994	0.987	0.977	1.004	0.992	1.109	0.979	0.910	1.013
1640	CINCINVATI, OH-KY-IN	0.954	0.954	0.974	0.971	0.995	1.001	1.012	0.982	0.978
	CLARKSVILLE-HOPKINSVILL, TN-KY	0.839	0.822	0.837	0.817	0.839	0.804	0.832	0.792	0.927
	CLEVELAND, OH	1.027	1.027	1.001	1.039	1.035	1.036	1.054	1.052	0.986
	COLORADO SPRINCS, CO	0.922	0.935	0.913	0.948	0.918	0.948	0.906	0.933	0.955
	COLLIMBIA, MD	0.866	0.879	0.910	0.862	0.897	0.996	0.887	0.908	0.973
	COLUMBIA, SC	0.873	0.881	0.889	0.864	0.896	0.867	0.878	0.890	0.940
	COLUMBUS, CA-AL	0.832	0.848	0.844	0.825	0.842	0.796	0.826	0.822	0.931
		0.941	0.941	0.953	0.933	0.981	0.932	0.988	0.967 0.895	0.978
	CORPUS CHRISII, TX CUMBERLAND,MD-W VA	0.899 0.891	0.901 0.898	0.902 0.906	0.916 0.933	0.914 0.903	0.915 0.873	0.916 0.949	0.895 0.817	0.950 0.954
	CUMBERLAND, MD-W VA DALLAS, TX	0.891 0.952	0.898 0.952	0.906 0.960	0.933	0.903	0.8/3	0.949 0.984	0.817 1.078	0.954
	DAWILLE, VA	0.877	0.887	0.848	0.851	0.817	0.796	0.818	0.791	0.924
	DAVENPORT-ROCK ISLAND-MOLINE, I		0.993	0.982	1.019	0,996 0,971	0.982	1.056	0.974	0.978
	DAYTON-SPRINGFIELD, OH	0.981	0.980	0.979	1.013	0.971	0.990	1.004	0.958	0.972
	DAYTONA BEACH, FL	0.931	0.927	0.919	0.922	0.863	0.905	0.852	0.919	0.979
	DECATUR, IL	0.970 1 037	0.964	0.970	1.023	1.008	0.943	1.082	0.979 1.124	0.994
	DENVER, CO	1.037 0.961	1.037	1.018	1.048	1.060	1.111 0.966	1.045	1.124 1.022	0.994
	DES MOINES, IA DEIROIT, MI	1.216	0.970 1.216	0.957 1.230	0.959 1.225	0.978 1.165	1.139	0.979 1.221	1.120	0.968 1.081
	DOTHAN, AL	0.871	0.895	0.888	0.897	0.887	0.837	0.855	0.812	0.946
	DUBUQUE, IA	0.886	0.888	0.888	0.897	0.888	0.837	0.833	0.812	0.954
	DULUTH, MN-WI	0.957	0.888	0.963	0.832	1.031	0.933	1.011	0.884	0.954
	EAU CLAIRE, WI	0.937	0.933	0.963	0.900	0.858	0.933	0.872	0.8847	0.939
	EL PASO, TX	0.913	0.890	0.914	0.923	0.855	0.883	0.872	0.847	0.939
2530	EIKHART-COCHEN IN		0.890	0.898	0.857	0.803	0.871	0.819	0.7/2	0.940
2222	EIMIRA. NV	0.945	0.942	0.898	0.927	0.908	0.892	0.949	0.943	0.970
23/7	ELMIRA, NY ENID, CK	0.842	0.833	0.932 0.8 8 7	0.953	0.913	0.895	0.94/	0.901	0.970 0.944
3350	ERIE, PA	0.842	0.949	0.887	0.816	0.90/	0.895	0.901	0.976	0.982
	EUGENE-SPRINGFIELD, OR	0.932	0.949	0.948	0.973	1.010	1.033	1.023	0.923	1.003
2440	EVANSVILLE, IN-KY	0.932	0.924	0.946	0.937	0.915	0.923	0.942	0.923	0.942
	FARGO-MOORHEAD, ND-MN	0.896	0.905	0.919	0.917	0.916	0.960	0.942	0.969	0.942
2560	FAYETTEVILLE, NC	0.883	0.904	0.856	0.887	0.910	0.805	0.907	0.785	0.920
	FAYETTEVILLE-SPRINGDALE, AR	0.757	0.730	0.756	0.766	0.830 0.797	0.780	0.779	0.783	0.920
	FLINT, MI	1.126	1.135	1.160	1.145	1.090	1.128	1.261	1.058	1.050
	FLORENCE, AL	0.932	0.952	0.912	0.926	0.888	0.804	0.910	0.846	0.942
	FLORENCE, SC	0.864	0.798	0.825	0.799	0.821	0.768	0.816	0.775	0.917
	FORT COLLINS-LOVELAND, CO	0.915	0.898	0.923	0.906	0.919	0.985	0.923	0.926	0.972
	FORT LAUDERDALE-HOLLYWOOD-POMPA		1.025	1.007	1.035	1.021	1.073	1.001	1.161	1.039
	FORT MYERS-CAPE CORAL, FL	0.961	1.022	0.916	0.983	0.920	0.933	0.897	0.983	0.987
2710	FORT PIERCE, FL	0.955	0.960	0.950	0.920	0.934	0.926	0.916	0.954	0.994
2720	FORT SMITH, AR-OK	0.833	0.825	0.844	0.825	0.830	0.845	0.835	0.796	0.914
2750	FORT WALTON BEACH, FL	0.890	0.893	0.903	0.923	0.842	0.856	0.827	0.866	0.950
2760	FORT WAYNE, IN	0.936	0.945	0.937	0.954	0.938	0.896	0.969	0.916	0.949

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			Occrib	Occup	Educ	NI	HOFA	477	Per	0
MSA Code	Name	Baseline	& Educ Adjust	Adjust Only	Adjust Only	Normanuf Workers	Hospital Wage	All Workers	Capita Income	Overhead Only
			12Just	u _L ,	(ALL)	WOLIGEES	"OBC	WOLLGED	20012	ŒL)
	FORT WORTH-ARLINGTON, TX	0.888	0.889	0.907	0.889	0.914	0.917	0.913	1.012	0.947
	FRESNO, CA	1.043	1.052	1.033	1.058	1.042	1.072	1.025	0.990	1.025
	GADSDEN, AL	0.873	0.874	0.902	0.909	0.847	0.844	0.927	0.807	0.937
[_]	CAINESVILLE, FL	0.898	0.908	0.893	0.890	0.878	0.921	0.862	0.835	0.969
	CALVESTON-TEXAS CITY, TX	0.921	0.921	0.963	0.903	0.985	1.002	1.004	0.989	0.960
	CARY-HAMMOND, IN	1.017 0.942	1.018 0.958	1.029 0.933	1.053 0.898	1.032 0.891	1.016	1.175 0.910	0.971 0. 86 9	0.996 0.971
	GLENS FALLS, NY GRAND FORKS, ND	0.879	0.853	0.933	0.840	0.891	0 .921 0 .913	0.910	0.904	0.949
	CRAND RAPIDS, MI	1.004	1.000	1.000	1.001	1.003	1.002	1.023	0.981	0.998
2.00	CREAT FALLS, MT	0.929	0.939	0.928	0.916	0.942	0.963	0.927	0.900	0.956
	GREELEY, CO	0.886	0.913	0.892	0.859	0.905	0.964	0.913	0.904	0.955
	GREEN BAY, WI	0.941	0.944	0.935	0.971	0.928	0.938	0.963	0.952	0.951
	GREENSBORO-WINSTON-SALEM-HIGH P		0.893	0.893	0.858	0.879	0.867	0.867	0.909	0.928
	CREEWILLE-SPARTANBURG, SC	0.868	0.884	0.879	0.877	0.872	0.848	0.856	0.850	0.923
	HAGERSTOWN, MD	0.935	0.928	0.939	0.957	0.926	0.921	0.955	0.885	0.972
	HAMILION-MIDDLETOWN, CH	0.961	0.962	0.973	0.949	0.946	0.963	1.024	0.955	0.982
	HARRISBURG-LEBANON-CARLISE, PA	0.968	0.983	0.990	0.981	1.012	0.959	0.998	1.003	0.996
3283	HARTFORD-MIDDLETOWN-NEW BRITAIN		1.044	1.048	1.040	1.058	1.076	1.061	1.162	1.031
3290	HICKORY, NC	0.800	0 .791	0.790	0.804	0.829	0.827	0.791	0.830	0.909
3320	HONOLULU, HI	1.055	1.051	1.058	1.053	1.070	1.115	1.049	1.088	1.041
3350	HOUMA-THIEODAUX, LA	0.912	0.920	0.935	0.937	0.969	0.893	0.959	0.889	0.963
	HOUSTON, TX	1.004	1.004	1.010	1.028	1.056	0.978	1.049	1.064	0.974
	HUNTINGTON-ASHLAND, W-KY-OH	0.906	0.905	0.911	0.902		0.900	0.964	0.827	0.955
	HNISVILLE, AL	0.930	0.930	0.960	1.019	0.941	0.852	0.921	0.935	0.950
3480 3500	INDIANAPOLIS, IN	0.950 0.881	0.948 0.886	0.954 0. 898	0.933 0.853	0.949 0.944	0.956 1.096	0.972 0.933	0.963 0.942	0.955 0.968
3520	IOWA CITY, IA JACKSON, MI	1.052	1.051	1.059	1.075	1.043	0.980	1.056	0.936	1.000
3560	JACKSON, MS	0.879	0.883	0.908	0.851	0.908	0.898	0.889	0.903	0.961
3580	JACKSON, IN	0.873	0.883	0.851	0.888	0.853	0.00	0.860	0.203	0.921
3600	JACKSONVILLE, FL	0.945	0.962	0.940	0.930	0.945	0.927	0.937	0.958	0.983
3605	JACKSONVILLE, NC	0.867	0.859	0.788	0.828	0.787	0.776	0.769	0.769	0.909
3620	JANESVILLE-BELOIT, WI	0.923	0.909	0.902	0.894	0.882	0.893	0.938	0.918	0.953
3640	JERSEY CITY, NU	1.116	1.116	1.094	1.111	1.132	1.040	1.095	1.016	1.039
3660	JOHNSON CITY-KINGSPORT-BRISTOL,	0.876	0.871	0.872	0.888	0.837	0.819	0.855	0. <i>7</i> 87	0.920
3680	JOHNSTOWN, PA	0.931	0.945	0.943	0.937	0.962	0.911	0.973	0.852	0.965
3690	JOLIET, IL	1.065	1.065	1.038	1.047	1.084	1.072	1.113	1.044	1.037
3710	JOPLIN, MO	0.893	0.872	0.837	0.850	0.848	0 .87 6	0.855	0.830	0.947
3720	KALAMAZOO, MI	1.038	1.034	1.017	1.040	0.980	1.088	1.030	1.011	0.999
3740	KANKAKEE, IL	0.924	0.941	0.951	0.958	0.968	0.933	1.003	0.934	0.988
3760	KANSAS CITY, MO-KS	0.948	0.946	0.969	0.944	1.025	0.999	1.026	1.040	0.996
3800	KENOSHA, WI	0.961	0.961	1.007	1.002	1.008	1.005	1.098	1.000	0.990
	KILLEEN-TEMPLE, TX	0.859	0.860	0.838	0.862	0.834	0 .8 38 0 .8 46	0.814	0.845	0.927
3850	KNOXVILLE, IN KOKOMO, IN	0.855 0.980	0 .8 62 0 .95 0	0 .88 5 0 . 948	0.888 1.004	0 .875 0 .88 0	0.910	0. 8 63 1.069	0.840 0.932	0.927
	LA CROSSE, WI	0.867	0.910	0.903	0.899	0.880	0.910	0.888	0.930	0.947 0.953
	LAFAYETTE, LA	0.943	0.921	0.955	0.940	0.984	0.947	0.957	0.999	0.933
	LAFAYEITE, IN	0.850	0.845	0.860	0.838	0.858	0.864	0.891	0.857	0.937
	LAKE CHARLES, LA	0.897	0.867	0.892	0.877	0.975	0.924	1.010	0.905	0.952
	LAKE COUNTY, IL	1.076	1.076	1.072	1.093	1.105	1.106	1.113	1.221	1.052
	LAKELAND-WINIER HAVEN, FL	0.901	0.881	0.888	0.888	0.884	0.876	0.878	0.875	0.965
	LANCASIER, PA	0.925	0.911	0.948	0.921	0.917	0.978	0.947	0.978	0.988
4040	LANSING-FAST LANSING, MI	1.013	1.004	1.029	0.995	1.029	1.020	1.063	1.006	1.010
4080	LAREDO, TX	0.845	0.827	0.834	0.810	0.809	0.790	0.789	0.651	0.915
	LAS CRUCES, NM	0.874	0.847	0.885	0.886	0.866	0.846	0.842	0.790	0.939

			Occup	Occup	Educ		HCFA		Per	
MSA			& Educ	Adjust	Adjust	Normanuf		All	Capita	Overhea 5
	Name	'Baseline	Adjust	Only	Only	Workers	Wage	Workers	Income	Only:
4120	LAS VEGAS, NV	1.120	1.103	1.089	1.087	1.084	1.076	1.063	1.058	1.041
4150	LAWRENCE, KS	0.832	0.798	0.839	0.815	0.865	0.935	0.863	0.844	0.955
4200	LAWTON, OK	0.865	0.833	0.849	0.858	0.834	0.873	0.824	0.799	0.930
4243	LEWISION-AUBURN, ME	0.803	0.796	0.816	0.788	0.815	0.880	0.795	0.848	0.939
4280	LEXINGION-FAYEITE, KY	0.884	0.882	0.918	0.879	0.897	0.919	0.917	0.996	0.955
4320	LIMA, OH	0.910	0.893	0.909	0.917	0.906	0.927	0.981	0.916	0.964
	LINCOLN, NE	0.853	0.860	0.866	0.841	0.890	0.889	0.888	0.934	0.934
	LITTLE ROCK-NORTH LITTLE ROCK,	0.884	0.892	0.895	0.894	0.910	0.964	0.890	0.905	0.936
	LONGVIEW-MARSHALL, TX	0.873	0.857	0.868	0.842	0.886	0.833	0.909	0.912	0.944
	LORAIN-ELYRIA, OH	0.950	0.950	0.957	0.968	0.963	0.961	1.055	0.924	0.976
	LOS ANGELES-LONG BEACH, CA	1.229	1.229	1.228	1.223	1.184	1.239	1.164	1.180	1.100
	LOUISVILLE, KY-IN	0.927	0.942	0.941	0.958	0.921	0.919	0.953	0.936	0.945
	LUBBOOK, TX	0.816 0.838	0.821 0.833	0.829	0.815 0.846	0.860 0.846	0.901	0.844	0.898	0.924
	LYNCHBURG, VA MACON-WARNER ROBINS, GA	0. 838 0.857	0.833 0.856	0 .868 0 .892	0.846	0.846	0.815 0.885	0.864 0.911	0.876 0.880	0.934
	MADISON, WI	0.85/	0.944	0.892	0.825	0.927	0.988	0.911	1.033	0.949
4763		0.922	0.909	0.936	0.920	0.943	0.942	0.967	1.053	0.971
4800	MANSFIELD, OH	0.903	0.896	0.936	0.920	0.920	0.942	0.968	0.916	0.958
	MCALLEN-EDINBURG-MISSION, TX	0.802	0.842	0.810	0.813	0.797	0.794	0.775	0.658	0.921
4890		0.940	0.987	0.958	0.970	0.797	0.985	1.000	0.895	0.921
4900	•	0.940	0.947	0.962	1.022	0.940	0.923	0.949	0.975	0.985
4920	MEMPHIS, IN-AR-MS	0.876	0.895	0.889	0.867	0.926	0.945	0.915	0.890	0.941
4940	MERCED, CA	1.064	1.122	1.039	1.077	0.981	0.7.5	0.968	•	1.017
5000		1.130	1.130	1.078	1.121	1.076	1.056	1.038	1.172	1.050
5015	MIDDLESEX-SOMERSET-HUNTERDON, N	1.162	1.163	1.150	1.168	1.139	1.079	1.141	1.246	1.074
5040	MIDLAND, TX	1.020	0.983	0.988	1.095	1.027	1.009	0.999	1.148	0.972
5080	MILWALKEE, WI	1.000	1.000	1.001	0.999	1.020	1.026	1.044	1.044	0.983
5120	MINNEAPOLIS-SI PAUL, MN-WI	1.039	1.045	1.027	1.045	1.046	1.062	1.047	1.097	1.001
5160	MOBILE, AL	0.877	0.878	0.886	0.884	0.907	0.869	0.920	0.837	0.954
	MODESTO, CA	1.065	1.074	1.046	1.098	1.033	1.106	1.039	0.982	1.029
	MONYOUTH-OCEAN, NU MONYOE, LA	1.128	1.128	1.097	1.151	1.050	1.005	1.030	1.107	1.038
		0.896	0.889	0.918	0.894	0.889	0.877	0.895	0.830	0.941
	MONICOMERY, AL	0.904	0.893	0.907	0.882	0.924	0.863	0.899	0.892	0.951
	MINCIE, IN	0.893	0.902	0.909	0.926	0.833	0.897	0.904	0.825	0.923
	MUSKEGON, MI	0.997	0.980	1.014	1.016	0.969	0.947	1.019	0.887	0.981
	NAPLES, FL	1.018	1.052	0.969	1.061	0.943	0.955	0.919	1.076	0.9%
	NASHVILLE, IN	0.899	0.893	0.903	0.896	0.923	0.887	0.911	0.917	0.947
	NASSAU-SUFFOLK, NY		1.269	1.272	1.279	1.185	1.279	1.163	1.319	1.136
	NEW BEDFORD-FALL RIVER-ATTLEBOR NEW HAVEN-WEST HAVEN-WATERBURY-		0.943 1.011	0.944 1.025	0.962 1.006	0.923 1.052	0.942 1.073	0.895 1.037	0.942 1.107	0.983 1.037
	NEW HAVEN-WEST HAVEN-WATERBURY-	1.021	1.011	1.025	1.005	0.999	1.054	1.03/	1.107	1.037
	NEW CRLEANS, LA	1.021	1.014	1.032	1.017	1.040	0.950	1.033	1.095	1.027
	NEW YORK, NY	1.279	1.280	1.294	1.252	1.286	1.317	1.252	1.249	1.151
	NEWARK, NJ	1.156	1.156	1.146	1.158	1.142	1.092	1.127	1.196	1.050
	NIAGARA FALLS, NY	1.010	1.010	1.000	1.030	0.915	0.889	1.018	0.941	0.972
	NORFOLK-VIRGINIA BEACH-NEWPORT	0.914	0.917	0.932	0.918	0.929	0.921	0.932	0.949	0.967
	OAKLAND, CA	1.186	1.186	1.206	1.191	1.246	1.349	1.234	1.261	1.124
5790	OCALA, FL	0.844	0.775	0.834	0.817	0.849	0.861	0.833	0.820	0.956
5800	ODESSA, TX	0.978	1.019	0.969	1.021	0.959	0.911	0.956	0.952	0.961
5880	OKLAHOMA CITY, OK	0.891	0.888	0.921	0.865	0.948	0.976	0.939	0.992	0.958
5910	OLYMPIA, WA	1.068	1.084	,1.047	1.082	1.076	1.026	1.065	1.001	1.016
5920	OMAHA, NE-IA	0.888	0.880	0.907	0.864	0.943	0.939	0.934	0.962	0.943
	CRANCE COUNTY, NY	1.041	1.041	1.048	1.055	1.041	0.979	1.012	1.017	1.045
5960	ORLANDO, FL	0.962	0.993	0.948	0.979	0.913	0.966	0.902	0.973	0.986

			Occup	Occup	Educ		HCFA		Per	
4SA		n 1:	& Educ	Adjust	Adjust		Hospital		Capita	Overhead
Code	Name	Baseline	Adjust	Only	Only	Workers	Wage	Workers	Income	Only
5990	OWENSBORO, KY	0.893	0.881	0.909	0.844	0.858	0.817	0.880	0,891	0.937
5000	OXNARD-VENIURA, CA	1.147	1.147	1.149	1.173	1.114	1.193	1.093	1.125	1.074
5015	PANAMA CITY, FL	0.903	0.929	0.913	0.945	0.838	0.834	0.828	0.864	0.947
5020	PARKERSBURG-MARIETTA, WV-OH	0.885	0.878	0.885	0.877	0.892	0.869	0.947	0.870	0.943
5025	PASCAGOULA, MS	0.874	0.872	0.920	0.855	0.887	0.900	0.972	0.814	0.947
5080	PENSACOLA, FL	0.906	0.910	0.912	0.882	0.880	0.871	0.888	0.864	0.965
5120	PASCAGOLIA, MS PENSACOLA, FL PEORIA, IL PHILADELPHIA, PA-NU	1.049	1.073	1.064	1.083	1.060	1.023	1.156	1.011	1.024
5160	PHILADELPHIA, PA-NU	1.097	1.097	1.096	1.108	1.103	1.122	1.098	1.102	1.056
5200	PHOENIX, AZ	1.027	1.040	1.022	1.041	1.027	1.006	1.020	1.025	1.021
	PINE BLUFF, AR	0.817	0.826	0.869	0.823	0.881	0.778	0.882	0.783	0 .91 0
5280	PITTSBURGH, PA	1.010	1.010	1.027	1.031	1.021	1.018	1.055	1.006	0.996
5323	PITTSFIELD, MA	0.979	0.970	0.963	0.982	0.915	0.972	0.962	0.998	0.990
5403	PORTLAND, ME	0.916	0.910	0.916	0.876	0.931	0.973	0.917	1.003	0.995
5440	PORTLAND, OR	0.995	0.996	1.014	1.006	1.071	1.087	1.066	1.037	1.011
3453	PORTSMOUTH-DOVER-ROCHESTER, NH	0.934	0.880	0.908	0.873	0.915	0.927	0.907	1.019	0.989
	POUCHKEEPSIE, NY	1.092	1.054	1.081	1.123	1.027	1.015	1.088	1.082	1.033
	PROVIDENCE-PAWIUCKET-WOONSOCKET		1.012	0.998	1.016	0.964	0.982	0.932	0.985	0.986
	PROVO-OREM, UT	0.917	0.925	0.881	0.917	0.860	0.910	0.874	0.717	0.947
	PUEBLO, CO	1.039	1.060	0.974	1.013	0.937	0.993	0.986	0.865	0.961
600	RACINE, WI	1.042	1.042	1.012	1.042	0.969	0.946	1.024	0.991	0.976
640	RALINE, WI RALEICH-DURHAM, NC RAPID CITY, SD READING, PA REDDING, CA RENO, NV RICHLAND-KENNEWICK, WA	0.892	0.895	0.907	0.884	0.921	0.903	0.908	0.959	0.947
1660	RAPID CITY, SD	0.871	0.846	0.860	0.832	0.881		0.856		0.933
680	READING, PA	0.966	0.960	0.961	0.968	0.937	0.959	0.952	1.003	0.977
690	REDDING, CA	1.076	1.061	1.047	1.086	1.035	1.115	1.027	0.931	1.022
720	RENO, NV	1.105	1.115	1.099	1.091	1.122	1.140	1.099	1.188	1.075
740	RICHLAND-KENNEWICK, WA	1.039	1.044	1.077	1.122	1.191	1.018	1.168	1.066	1.035
1/60	KICHUND-PETERSBURG, VA	0.903	0.886	0.916	0.867	0.932	0.899	0.940	1.012	0.950
780	RIVERSIDE_SAN BERNARDINO,CA		1.110	1.093	1.121	1.077	1.152	1.066	1.029	1.053
800	ROANOKE, VA	0.894	0.899	0.901	0.904	0.900	0.858	0.898	0.937	0.940
820	ROCHESTER, MV	0.983	1.024	1.008	1.059	0.956	0.957	0.986	1.077	0.973
880	ROCHESIER, NY	1.059	1.071	1.068	1.067	0.998	0.989	1.058	1.051	1.007
920	ROCKFORD, IL	0.976	0.983	0.958	1.012	0.967	1.034	1.039	0.984	0.994
	SACRAMENTO, CA	1.119	1.127	1.133	1.134	1.129	1.180	1.107	1.057	1.058
980	SAGINAW-BAY CITY-MIDLAND, MI		1.093	1.099	1.113	1.023	1.031	1.128	0.966	1.006
000	ST CLOUD, MN ST JOSEPH, MO	0.913 0.848	0.933 0.900	0.888 0.896	0.941 0.900	0.868 0.874	0.924 0.901	0.867 0.882	0.834 0.904	0.953 0.957
040	ST LOUIS, MO-IL	0.998	1.002	1.011	1.024	1.038	1.026	1.054	1.060	1.013
080	SALEM, OR	0.941	0.932	0.963	0.916	1.006	1.018	0.998	0.917	0.998
120	SALINAS-SEASIDE-MONIEREY, CA	1.133	1.119	1.095	1.132	1.077	1.155	1.062	1.106	1.053
160	SALT LAKE CTIY-OGDEN, UT	0.960	0.980	0.971	0.968	1.004	0.962	0.981	0.890	0.974
200	SAN ANGELO, TX	0.833	0.879	0.837	0.892	0.844	0.838	0.820	0.928	0.933
240	SAN ANIONIO, TX	0.884	0.894	0.904	0.885	0.878	0.860	0.857	0.891	0.944
320	SAN DIEGO, CA	1.119	1.123	1.099	1.142	1.082	1.188	1.072	1.086	1.059
360	SAN FRANCISCO, CA	1.224	1.225	1.242	1.222	1.285	1.446	1.259	1.429	1.143
400	SAN JOSE, CA	1.240	1.240	1.258	1.263	1.238	1.353	1.243	1.329	1.136
480	SANTA BARBARA-SANTA MARTA-LOMPO		1.140	1.111	1.145	1.090	1.131	1.082	1.166	1.067
485	SANTA CRUZ, CA	1.100	1.100	1.083	1.096	1.090	1.183	1.075	1.110	1.088
490	SANTA FE, NM	0.988	1.017	1.019	1.088	1.044	0.959	1.014	1.013	0.999
500	SANTA ROSA-PETALLMA, CA	1.102	1.102	1.110	1.124	1.114	1.204	1.092	1.145	1.074
510	SARASOTA, FL	0.962	0.969	0.920	0.953	0.917	0.948	0.901	1.132	0.996
520	SAVANNAH, CA	0.876	0.873	0.888	0.866	0.900	0.864	0.921	0.893	0.950
560	SCRANION-WILKES BARRE, PA	0.910	0.918	0.912	0.925	0.910	0.928	0.891	0.888	0.959
500	SEATTLE, WA	1.065	1.065	1.070	1.083	1.121	1.075	1.129	1.128	1.023
610	SHARON, PA	0.942	0.941	0.955	0.956	0.929	0.935	1.026	0.883	0.977
	,	3.,,	3.5 (4	5.,55	5.,50	3.,4,	0.700		3.30	0.777

			Occup	Occup	Educ		HCFA		Per	
MSA Code	Name	Baseline	& Educ Adjust	Adjust Only	Adjust Only	Normanuf Workers	Hospital Wage	All Workers	Capita Income	Overher Only
COURC	TOIL .		, and and	G LL)	u.i.,	"OLIGES	"age	HOLIGIS	HAMIL	GIL,
7620	•	0.894	0.935	0.896	0.974	0.896	0.913	0.946	0.945	0.949
7640	SHERMAN-DENISON, TX	0.855	0.861	0.866	0.883	0.864	0.833	0.876	0.908	0.93
7680	SHREVEPORT, LA SIOUX CITY, IA-NE	0.971	0.973	0.950	0.956	0.955	0.916	0.952	0.930	0.96
7720	SIOUX CITY, IA-NE	0.929	0.909	0.886	0.888	0.906	0.921	0.915	0.908	0.94
//60	SIOUX FALLS, SD	0.868	0.867	0.871	0.852	0.901	0.934	0.905	0.954	0.952
	SOUTH BEND-MISHAWAKA, IN	0.893	0.905	0.918	0.922	0.911	0.912	0.951	0.914	0.937
7840		0.974	0.962	0.974	0.981	1.001	1.036	0.992	0.940	0.98
7880	SPRINGFIELD, IL	1.001	0.997	1.002	0.991	1.026	1.004	1.012	1.015	1.00
7920	SPRINGFIELD, MO	0.874	0.909	0.914	0.928	0.905	0.926	0.908	0.898	0.96
8003	SPRINGFIELD, MA	0.956	0.957	0.962	0.963	0.953	0.970	0.954	0.983	0.99
8050	STATE COLLEGE, PA	0.935	0.909	0.919	0.917	0.927	0.997	0.912	0.864	0.98
8080	STEUBENVILLE-WEIRION, OH-WV	0.938	0.975	0.963	0.970	0.958	0.921	1.141	0.900	0.96
8120	STOCKTON, CA	1.089	1.067	1.058	1.083	1.084	1.152 0.975	1.075	0.998	1.03
8160	•	0.969	0.966	0.977	0.960 1.069	0.963 1.059	1.022	0.985	0.957 0.966	0.98
8200 8240	TACOMA, WA TALLAHASSEE. FL	1.041 0.888	1.041 0. 89 6	1.036 0.895	0.873	0.892	0.916	1.056 0.871	0.858	0.99
8280		0.913	0.896	0.895	0.935	0.892	0.942	0.896	0.965	0.97
8320	TERRE HAUTE, IN	0.855	0.869	0.913	0.933	0.842	0.816	0.868	0.823	0.91
8360	TEXARKANA, TX-TEXARKANA, AR	0.824	0.829	0.862	0.809	0.863	0.826	0.888	0.826	0.92
8400	TOLEDO, OH	0.975	0.987	0.988	0.993	1.011	1.080	1.042	0.990	0.92
8440	TOPEKA, KS	0.975	0.877	0.918	0.993	0.946	0.965	0.945	1.013	0.96
8480	TRENIUN, NU	1.122	1.122	1.095	1.123	1.105	1.037	1.097	1.154	1.05
8520	TUCSON, AZ.	0.981	0.975	0.982	0.979	0.994	0.985	0.981	0.964	1.01
	TULSA, OK	0.918	0.931	0.945	0.961	0.974	0.938	0.972	0.993	0.96
8600	TUSCALOOSA, AL	0.863	0.875	0.881	0.874	0.890	0.930	0.892	0.825	0.95
8640		0.911	0.898	0.889	0.887	0.903	0.917	0.909	0.967	
	UIICA-ROME, NY	0.926	0.933	0.939	0.948	0.892	0.865	0.916	0.891	0.95
	VALLEJO-FAIRFIELD-NAPA, CA	1.062	1.062	1.102	1.079	1.124	1.216	1.131	1.106	1.07
	VANCOUVER, WA	1.012	1.012	1.005	1.008	1.039	1.047	1.056	0.942	0.99
	VICTORIA, TX	0.910	0.974	0.930	0.978	0.893	0.840	0.899	0.972	0.96
	VINFIAND-MILLVILLE-BRIDGETON, N		0.972	0.949	1.027	0.987	0.976	0.994	0.950	1.01
	VISALIA-TULARE-PORTERVILLE, CA	1.024	1.007	1.013	1.060	0.965	1.025	0.952	0.918	1.02
	WACO, TX	0.878	0.879	0.861	0.877	0.836	0.845	0.826	0.886	0.92
	WASHINGTON, D C -MD-VA	1.191	1.202	1.199	1.190	1.195	1.134	1.167	1.271	1.06
8920	WATERLOO-CEDAR FALLS, IA		0.931	0.945	0.957	0.903	0.938	1.021	0.932	0.96
8940	WALSAU, WI	0.926	1.000	0.896	0.932	0.877	0.910	0.916	0.868	0.94
8960	WEST PALM BEACH-BOCA RATON-DELF	0.990	0.994	0.980	1.028	0.969	0.963	0.966	1.154	0.99
	WHEELING, WV-OH	0.927	0.913	0.918	0.914	0.964	0.907	0.971	0.873	0.94
9040	WICHITA, KS	0.924	0.923	0.941	0.938	0.956	1.026	0.991	1.034	0.97
9080	WICHITA FALLS, TX WILLIAMSPORT, PA WILMINGTON, DE-NU-MD WILMINGTON, NC	0.863	0.870	0.871	0.868	0.871	0.838	0.861	0.943	0.93
9140	WILLIAMSPORT, PA	0.914	0.887	0.918	0.884	0.898	0.883	0.927	0.870	0.96
9160	WILMINGTON, DE-NU-MD	1.103	1.103	1.051	1.098	1.026	1.011	1.071	1.064	1.01
9200	WILMINGION, NC	0.856	0.846	0.890	0.882	· 0 . 846	0.872	0.867	0.842	0.92
9243	WORCESIER-FITTCHBURG-LEOMINSTER,	0.982	0.969	0.970	0.973	0.975	0.974	0.978	0.986	1.00
	YAKIMA, WA	1.004	1.017	0.969	1.016	0.953	0.977	0.948	0.910	0.98
9280	YORK, PA	0.929	0.886	0.913	0.907	0.916	0.939	0.935	0.937	0.97
9320	YOUNGSTOWN-WARREN, OH	0.954	0.977	0.962	1.024	0.947	0.968	1.049	0.927	0.97
9340	YUHA CITY, CA	1.028	1.087	1.056	1.078	0.984	1.007	0.968	0.931	1.01
9901	Alabama.	0.864	0.863	0.842	0.850	0.811	0.763	0.801	0.751	0.92
9902	Alaska	1.322	1.333	1.343	1.313	1.461	1.343	1.429	1.307	1.11
9904	YOUNCSTOWN-WARREN, OH YUBA CITY, CA Alabama Alaska Arizona Arkansas California	0.942	0.944	0.934	0.946	0.970	0.914	0.950	0.809	0.97
9905	Arkansas	0.796	0.794	0.769	0.759	0.761	0.742	0.753	0.727	0.88
9906	Calliomia	0.998	1.000	0.988	1.011	1.012	1.064	1.006	0.940	1.01

MSA Code	Name	Baseline	Occup & Educ Adjust	Occup Adjust Only	Educ Adjust Only	Normanuf Workers	HCFA Hospital Wage	All Workers	Per Capita Income	Overhead Only
9908	Colorado	0.877	0.866	0.869	0.847	0.921	0.890	0.896	0.900	0.954
9909	Connecticut	0.976	0.937	0.948	0.925	0.939	1.000	0.936	1.051	1.006
9910	Delaware	0.925	0.918	0.891	0.933	0.873	0.845	0.864	0.892	0.944
9912	Florida	0.863	0.858	0.833	0.842	0.828	0.852	0.814	0.810	0.943
9913	Georgia	0.820	0.811	0.808	0.787	0.795	0.775	0.778	0.768	0.918
9915	Hawaii	1.010	1.003	1.020	1.023	1.038	1.009	1.025	0.954	1.031
9916	Idaho	0.884	0.879	0.895	0.880	0.902	0.886	0.897	0.837	0.960
9917	Illinois	0.910	0.903	0.897	0.904	0.922	0.881	0.933	0.886	0.966
9918	Indiana	0.870	0.863	0 .85 7	0.866	0.839	0.828	0 .87 3	0.822	0.925
9919	Iowa	0.851	0.848	0.845	0.855	0.838	0.838	0.853	0.852	0.934
9920	Kansas	0.807	0.799	0.809	0.791	0.818	0.821	0.817	0.903	0.928
9921	Kentucky	0.859	0.856	0.855	0.856	0.857	0.794	0.844	0.742	0.924
9922	Louisiana	0.853	0.868	0.863	0.852	0.887	0.826	0.884	0.767	0.928
9923	Maine	0.827	0.826	0.830	0.821	0.834	0.849	0.834	0.835	0.948
9924	Maryland	0.927	0.899	0.896	0.939	0.887	0.871	0.861	0.877	0.964
9925	Massachusetts	0.952	0.932	0.924	0.942	0.959	0.989	0.941	1.044	0.991
9926	Michigan	0.949	0.942	0.942	0.961	0.919	0.922	0.935	0.851	0.975
9927	Mirnesota	0.884	0.873	0.862	0.888	0.827	0.848	0.830	0.839	0.940
9928	Mississippi	0.822	0.819	0.804	0.786	0.794	0.763	0.772	0.718	0.910
9929	Missouri	0.826	0.825	0.837	0.809	0.822	0.829	0.807	0.790	0.944
9930	Montana Naharada	0.869	0.863	0.872	0.863	0.907	0.877	0.901	0.851	0.950
9931	Nebraska Neorda	0.799	0.800	0.785	0.768	0.785	0.790	0.781	0.845	0.906
9932 9933	Nevada	0.985 0.856	1.013 0.842	1.031 0.869	1.000 0.829	1.050	1.030	1.023 0.868	1.010 0.948	1.019 0.968
9935	New Hampshire	0.895	0.898	0.880	0.629	0.876 0.900	0.900 0.871	0.876	0.788	0.96
9936	New Mexico New York	0.8914	0.907	0.907	0.908	0.900	0.869	0.890	0.766	0.941
9937	North Carolina	0.812	0.803	0.907	0.800	0.789	0.784	0.769	0.760	0.909
9938	North Dakota	0.845	0.865	0.838	0.833	0.783	0.855	0.709	0.916	0.909
9939	Ohio	0.891	0.881	0.883	0.890	0.888	0.882	0.933	0.851	0.958
9940	Oklahama	0.836	0.829	0.833	0.794	0.815	0.803	0.809	0.809	0.912
9941	Oregon	0.930	0.932	0.935	0.932	0.969	0.997	0.991	0.889	0.987
9942	Pennsylvania	0.908	0.892	0.901	0.925	0.900	0.900	0.915	0.850	0.959
9944	Rhode Island	0.980	0.916	0.986	1.062	0.941	•	0.940	0.981	0.972
9945	South Carolina	0.829	0.832	0.808	0.812	0.787	0.763	0.778	0.738	0.904
9946	South Dakota	0.800	0.801	0.792	0.786	0.754	0.799	0.746	0.815	0.918
9947	Ternessee	0.820	0.820	0.801	0.794	0.789	0.756	0.774	0.725	0.902
9948	Texas	0.821	0.813	0.819	0.793	0.811	0.785	0.804	0.819	0.908
9949	Utah	0.946	0.935	0.906	0.919	0.947	0.903	0.932	0. <i>7</i> 89	0.958
9950	Vermont	0.804	0.801	0.823	0.789	0.823	0.855	0.823	0.844	0.941
9951	Virginia	0.842	0.829	0.834	0.804	0.829	0.799	0.810	0.800	0.922
9953	Washington	0.956	0.951	0.955	0.965	1.008	0.975	1.023	0.961	0.990
9954	West Virginia	0.845	0.852	0.862	0.836	0.938	0.842	0.919	0.780	0.933
9955	Wisconsin	0.849	0.843	0.852	0.849	0.821	0.854	0.836	0.838	0.935
9956	Wyoming	0.892	0.872	0.880	0.883	1.007	0.901	0.983	0.934	0.944

Note: State values shown are for rural areas.

APPENDIX C

Input Price Proxies and GMEIs by Carrier Locality

Table C-1. Input Price Proxies

By State and Carrier Locality:

In Alphabetical Order

Carrier-						
Locality		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
E100E	DIDMINGIAM AI	0.024	0.047	0.761	0.026	0.014
51005	BIRMINGHAM, AL	0.924	0.947	0.761	0.826	0.914
51004	MOBILE, AL	0.856	0.894	0.827	0.826	0.877
51002	NORTH CENTRAL AL	0.880	0.895	0.666	0.826	0.872
51001	NORTHWEST AL	0.941	0.880	0.697	0.826	0.906
51006	RURAL AL	0.899	0.881	0.629	0.826	0.875
51003	SOUTHEAST AL	0.889	0.890	0.679	0.819	0.877
102001	ALASKA	1.426	1.437	1.304	1.045	1.335
103005	FLAGSTAFF (CTTY), AZ	0.932	0.904	0.814	1.258	0.942
103001	PHOENIX (CITY), AZ	1.012	0.945	1.134	1.258	1.027
103007	PRESCOTT (CTTY), AZ	0.932	0.904	0.814	1.258	0.942
103099	RURAL ARIZONA	0.947	0.912	0.918	1.258	0.963
103002	TUCSON (CTTY), AZ	0.947	0.913	1.084	1.258	0.981
103008	YUMA (CITY), AZ	0.932	0.904	0.814	1.258	0.942
52013	ARKANSAS	0.842	0.857	0.683	0.309	0.818
205026	ANAHEIM-SANIA ANA, CA	1.184	1.126	1.618	1.374	1.209
54214	BAKERSFIELD, CA	1.112	1.053	1.106	1.374	1.102
54211	FRESNO/MADERA, CA	1.025	1.017	1.010	1.374	1.038
54213	KINGS/TULARE, CA	0.994	0.963	1.055	1.374	1.018
205018	LOS ANGELES, CA (1ST OF 8)		1.185	1.449	1.374	1.229
205019	LOS ANGELES, CA (2ND OF 8)		1.185	1.449	1.374	1.229
205020	LOS ANGELES, CA (3RD OF 8)		1.185	1.449	1.374	1.229
205021	LOS ANGELES, CA (4TH OF 8)		1.185	1.449	1.374	1.229
205022	LOS ANGELES, CA (5TH OF 8)		1.185	1.449	1.374	1.229
205023	LOS ANGELES, CA (6TH OF 8)		1.185	1.449	1.374	1.229
205024	LOS ANGELES, CA (7TH OF 8)		1.185	1.449	1.374	1.229
205025	LOS ANGELES, CA (8TH OF 8)		1.185	1.449	1.374	1.229
54203 54210	MARIN/NAPA/SOLANO, CA	1.049	1.163	1.485	1.374	1.127
54210 54212	MERCED/SURR. CNIYS, CA	1.070 1.092	0.996 1.045	1.038 1.327	1.374 1.3 7 4	1.063 1.114
54201	MONTEREY/SANTA CRUZ, CA	1.092	1.045	1.209	1.374	1.114
54201	N. COASTAL CNTYS, CA	1.015	0.992	0.974	1.374	1.019
54202	NE RURAL CA	1.113	1.249	1.580	1.374	1.186
54227	OAKLAND-BERKELEY, CA RIVERSIDE, CA	1.113	1.080	1.177	1.374	
54204	SACRAMENTO/SURR. ONTYS, C.		1.110	1.163	1.374	1.110
54215	SAN BERNADINO/E.CENTRAL CA		1.077	1.172	1.374	1.113 1.107
205028	SAN DIECO/IMPERIAL, CA	1.104	1.077	1.311	1.374	1.114
54205	SAN DIEGO/INPERIAL, CA	1.151	1.259	1.730	1.374	1.224
54206	SAN MATEO, CA	1.151	1.259	1.730	1.374	1.224
205016	SANTA BARBARA, CA	1.048	1.012	1.247	1.374	1.076
54209	SANTA CLARA, CA	1.191	1.225	1.719	1.374	1.240
54208	STOCKTON/SURR. CNTYS, CA		1.073	0.996	1.374	1.073
205017	VENTURA, CA	1.135	1.066	1.384	1.374	1.147
55001	COLORADO	0.997	0.982	0.981	0.685	0.976
307004	EASTERN CONN.	0.996	1.000	1.193	1.056	1.022
307004	NW AND N.CENTRAL CONN.	1.009	1.016	1.233	1.030	1.022
307001	SOUTH CENTRAL CONN.	1.073	1.031	1.329	1.190	1.092
307003	SW CONNECTICUT	1.212	1.076	1.397	1.234	1.184
57001	DELAWARE	1.103	1.009	1.051	0.665	1.044
58001	D.C. + MD/VA SUBURBS	1.236	1.165	1.374	0.924	1.191
59003	FORT LAUDERDALE, FL	0.973	0.928	1.035	1.380	0.999
59004	MIAMI, FL	1.137	1.013	1.071	1.645	1.120
59002	N/NC FLORIDA CITIES	0.902	0.888	0.913	1.110	0.926
59001	RURAL FLORIDA	0.862	0.855	0.737	1.110	0.880
2,001		0.002	U - U - U	0.757	1.110	0.000

Carrier-						
Locality		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
1311001	ATLANTA, GA	0.901	0.999	1.083	0.753	0.942
1311004	RURAL GEORGIA	0.823	0.839	0.653	0.751	0.826
1311002	SMALL GA CITIES 02	0.846	0.894	0.769	0.753	0.861
1311003	SMALL GA CITIES 03	0.845	0.864	0.719	0.719	0.847
112001	HAWATT	1.012	1.051	1.268	1.028	1.046
513012	NORTH IDAHO	0.859	0.895	0.846	0.891	0.884
513011	SOUTH IDAHO	0.869	0.911	0.893	0.891	0.897
62110	CHAMPAIGN-URBANA, IL	0.859	0.920	0.823	1.140	0.899
62116	CHICAGO, IL	1.175	1.155	1.193	1.778	1.184
62103	DE KALB, IL	0.913	0.927	0.830	1.140	0.931
62111	DECATUR, IL	0.923	0.950	0.805	1.140	0.937
62112	EAST ST. LOUIS, IL	0.956	0.977	0.882	1.360	0.979
62106	KANKAKEE, IL	0.889	0.941	0.810	1.140	0.917
62108	NORMAL, IL	0.987	0.995	0.891	1.140	0.988
62101	NORTHWEST, IL	0.896	0.909	0.751	1.140	0.910
62105	PEORIA, IL	1.037	1.085	0.992	1.140	1.040
62107	QUINCY, IL	0.896	0.909	0.751	1.140	0.910
62104	ROCK ISLAND, IL	0.979	0.976	0.883	0.832	0.963
62102	ROCKFORD, IL	1.038	1.037	1.011	1.361	1.048
62113	SOUTHEAST IL	0.896	0.909	0.751	1.140	0.910
62114	SOUTHERN IL	0.896	0.909	0.751	1.140	0.910
62109	SPRINGFIELD, IL	0.985	0.990	0.890	1.140	0.986
62115	SUBURBAN CHICAGO, IL	1.081	1.093	1.219	1.387	1.105
63001	METROPOLITAN INDIANA	0.991	1.010	0.852	0.556	0.956
63003	RURAL INDIANA	0.917	0.917	0.741	0.529	0.887
63002	URBAN INDIANA	0.920	0.918	0.772	0.531	0.892
64005	DES MOINES(POLK/WARREN), IA		0.965	0.925	0.667	0.961
64008	IOWA CITY (CITY LIMITS)	0.839	0.935	0.973	0.667	0.881
64003	NORTH CENTRAL IOWA	0.884	0.914	0.819	0.667	0.885
64002	NORTHEAST IOWA	0.887	0.910	0.830	0.667	0.887
64006	NORTHWEST IOWA	0.877	0.883	0.766	0.667	0.870
64004	S.CEN. IA(EXCL DES MOINES)		0.878	0.743	0.667	0.851
64001	SE IOWA (EXCL IOWA CITY)	0.913	0.931	0.838	0.667	0.905
64007	SOUTHWEST IOWA	0.870	0.900	0.780	0.616	0.868
74005	KANSAS CITY, KA	0.913	0.988	0.885	1.181	0.948
65001	RURAL KANSAS	0.814	0.896	0.761	0.775	0.844
74004	SUBURBAN KANSAS CITY, KA	0.913	0.988	0.885	1.181	0.948
66001	LEXINGTON & LOUISVILLE, KY		0.935	0.791	0.668	0.913
66003	RURAL KENTUCKY	0.898	0.896	0.695	0.676	0.915
66002	SM CITIES (CITY LIMITS) KY		0.926	0.735	0.711	0.890
52807	ALEXANDRIA, LA	0.942	0.901	0.738	0.810	
52803	•					0.913
	BATON ROUGE, LA	0.964	0.965	0.926	0.810	0.956
52806	LAFAYETTE, LA	0.926	0.926	0.843	0.810	0.920
52804	LAKE CHARLES, LA	0.899	0.951	0.732	0.810	0.897
52805	MONROE, LA	0.917	0.880	0.735	0.810	0.896
52801	NEW ORLEANS, LA	0.976	0.999	1.011	1.187	0.998
52850	RURAL LOUISIANA	0.886	0.916	0.686	0.851	0.882
52802	SHREVEPORT, LA	1.010	0.962	0.837	0.810	0.971
2120002	CENTRAL MAINE	0.770	0.855	0.854	0.718	0.820
2120001	NORTHERN MAINE	0.787 .	0.858	0.883	0.718	0.834
2120003	SOUTHERN MAINE	0.825	0.892	1.080	0.718	0.881
69001	BALTIMORE/SURR. CNTYS, MD	1.110	1.074	1.042	0.972	1.074
69003	SOUTH + E. SHORE MD	1.044	1.016	1.015	0.847	1.019
69002	WESTERN MARYLAND	1.025	1.030	1.004	0.873	1.012

Carrier-						- 3.
'Locality		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
70002	MASS.SUBURBS/RURAL(CTTTES)	0.987	0.993	1.272	0.857	1.014
70001	MASSACHUSETTS URBAN	1.007	1.022	1.444	0.857	1.049
71001	DETROIT, MI	1.234	1.196	1.053	1.740	1.205
71002	MICHIGAN, NOT DETROIT	1.039	1.038	0.843	1.256	1.024
72002	NORTHERN MINNESOTA	0.933	0.915	0.826	0.747	0.917
72004	SOUTHERN MINNESOTA	0.915	0.895	0.790	0.749	0.900
1024001	ST. PAUL-MINNEAPOLIS, MN	1.056	1.025	1.050	0.749	1.026
1025001	RURAL MISSISSIPPI	0.840	0.835	0.646	0.645	0.828
1025002	URBAN MS (CITY LIMITS)	0.865	0.901	0.785	0.652	0.868
74003	K.C. (JACKSON COUNTY), MO	0.913	0.988	0.885	1.181	0.948
74002	N. K.C. (CLAY/PLATTE), MO	0.913	0.988	0.885	1.181	0.948
1126003	RURAL (EXCL RURAL NW) MO	0.802	0.843	0.668	1.193	0.842
74006	RURAL NW COUNTIES, MO	0.813	0.867	0.702	1.181	0.855
1126002	SM. E.CITIES+JEFF.CNIY, MO	0.893	0.915	0.783	1.301	0.922
74001	ST. JOSEPH, MO	0.799	0.873	0.698	1.181	0.848
1126001	ST. LOUIS/LG. E.CITIES, MC	0.952	0.980	0.895	1.388	0.981
75101	MONTANA	0.869	0.918	0.847	0.720	0.884
64501	OMAHA + LINCOLN, NE	0.883	0.925	0.850	0.436	0.877
64504	RURAL NEBRASIKA	0.810	0.833	0.691	0.443	0.805
64503	URBAN (CNTY POP>25000) NE	0.824	0.854	0.718	0.436	0.819
129003	ELKO & ELY (CITIES), NV	0.938	1.022	1.064	1.147	0.985
129001	LAS VEGAS, ET AL (CTTIES), N		1.053	1.223	1.147	1.120
129002	RENO, ET AL (CTTIES), NV	2.000	1.060	1.427	1.147	1.083
129099	RURAL NEVADA	1.078	1.047	1.221	1.147	1.082
78040	NEW HAMPSHIRE	0.849	0.908	1.170	0.603	0.901
1331002	MIDDLE NEW JERSEY	1.137	1.004	1.248	1.297	1.119
1331001	NORTHERN NEW JERSEY	1.159	1.096	1.339	1.152	1.147
1331003	SOUTHERN NEW JERSEY	1.063	1.026	1.072	1.476	1.073
532001	NEW MEXICO	0.925	0.903	0.867	0.769	0.916
80101	BUFFALO/SURR. CNTYS, NY	1.022	0.963	0.842	0.966	0.987
80301	MANHATTAN, NY	1.237	1.245	1.578	1.865	1.279
80103	N. CENTRAL CITIES, NY	0.987	0.956	0.887	0.966	0.971
80302 80303	NYC SUBURBS/LONG I., NY	1.239	1.187	1.565	1.959	1.276
	POUGHKPSIE/N.NYC SUBURBS	1.014	0.972	1.104	1.225	1.028
1433004 80102	QUEENS, NY	1.237	1.245	1.578	1.865	1.279
80102	ROCHESTER/SURR. CNTYS, NY RURAL NEW YORK	1.085 0.952	1.038 0.931	1.008 0.862	0.966 0.966	1.051 0.946
1334095	RURAL NORTH CAROLINA	0.952	0.931	0.748	0.378	0.839
1334094	URBAN (CITY LIMITS) NC	0.824	0.878	0.748	0.378	0.882
82001	NORTH DAKOTA	0.860	0.887	0.779	0.690	0.864
1636001	AKRON, OH	0.970	0.985	0.779	0.923	0.957
1636002	CINCINATI, OH	0.955	1.024	0.807	0.923	0.954
1636003	CLEVELAND, OH	1.045	1.053	0.811	0.923	1.008
1636004	COLUMBUS, OH	0.931	0.988	0.859	0.923	0.941
1636005	DAYTON, OH	0.996	0.989	0.781	0.923	0.967
1636009	E. CENTRAL (STEUBENVL), OF		0.942	0.765	0.923	0.905
1636007	MANSFIELD, OH	0.887	0.945	0.738	0.923	0.897
1636013	MARION + SURR. CNIYS., OH		0.940	0.764	0.923	0.896
1636006	NORTHWEST (LIMA) OH	0.893	0.946	0.785	0.923	0.905
1636014	SCIOTO VALLEY, OH	0.909	0.966	0.816	0.923	0.921
1636015	SOUTHEAST (OHIO VALLEY) OF	H 0.892	0.930	0.769	0.848	0.896
1636008	SPRINGFIELD, OH	1.017	0.998	0.786	0.923	0.981
1636010	TOLEDO (LUCAS/WOOD), OH		1.048	0.918	0.923	0.975
1636012	W. CENIR (LAKE PLAINS), O		0.934	0.752	0.923	0.891

Carrier-						
Locality		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
1626011	VOI NICCTOLINI OLI	0.949	0.985	0.702	0.022	0.062
1636011	YOUNGSTOWN, OH		0.961	0.792 0.916	0.923	0.943
137001	OK CITY, ET AL (CITIES), OK	0.870	0.961		0.517	0.891
137099	RURAL OKLAHOMA	0.844		0.718	0.513	0.853
137004	SM. CITIES (NORTHERN), OK	0.868	0.875 0. 8 77	0.719 0.687	0.517 0.517	0.838
137003 137002	SM. CITIES (SOUTHERN), OK	0.912	0.877	0.906	0.517	0.847 0.907
138002	TULSA, ET AL (CTTIES), OK EUGENE, ET AL (CITIES), OR		0.947	1.052	0.953	0.907
138001	PORTLAND, ET AL (CITIES), OR		1.082	1.002	0.953	0.932
138099	RURAL OREGON	0.914	0.996	0.994	0.953	0.950
138003	SALEM, ET AL (CITIES), OR		0.986	0.987	0.953	0.937
138012	SW OR. CITIES (CITY LIMITS)		0.954	1.020	0.953	0.935
86502	LG. PENNSYLVANIA CITIES	1.030	1.026	0.967	1.362	1.037
86501	PHILLY/PITT MED SCHS/HOSPS		1.047	0.985	1.467	1.062
86504	RURAL PENNSYLVANIA	0.905	0.942	0.846	0.932	0.918
86503	SMALL PENNSYLVANIA CITIES	0.934	0.957	0.849	0.949	0.938
87001	RHODE ISLAND	1.035	0.955	1.058	0.736	1.003
88001	SOUTH CAROLINA	0.882	0.875	0.720	0.457	0.855
82002	SOUTH DAKOTA	0.803	0.832	0.718	0.689	0.818
544035	TENNESSEE	0.877	0.896	0.771	0.408	0.859
90029	ABILENE, TX	0.883	0.819	0.849	0.442	0.860
90026	AMARILLO, TX	0.889	0.901	0.779	0.505	0.872
90031	AUSTIN, TX	0.874	0.927	0.988	0.505	0.891
90020	BEAUMONT, TX	0.991	. 0.959	0.896	0.505	0.949
90009	BRAZORIA, TX	1.102	0.960	0.893	0.505	1.009
90010	BROWNSVILLE, TX	0.922	0.859	0.795	0.505	0.885
90024	CORPUS CHRISTI, TX	0.905	0.916	0.918	0.505	0.899
90011	DALLAS, TX	0.983	1.022	0.863	0.505	0.952
90012	DENION, TX	0.983	1.022	0.863	0.505	0.952
90014	EL PASO, TX	0.978	0.883	0.783	0.505	0.918
90028	FORT WORTH, TX	0.893	0.933	0.863	0.505	0.888
90015	GALVESTON, TX	0.928	1.036	0.834	0.505	0.921
90016	GRAYSON, TX	0.857	0.909	0.776	0.505	0.855
90018	HOUSTON, TX	1.056	1.098	0.796	0.657	1.004
90033	LAREDO, TX	0.871	0.821	0.733	0.505	0.845
90017	LONGVIEW, TX	0.870	0.902	0.882	0.505	0.873
90021	LUBBOCK, TX	0.800	0.869	0.754	0.505	0.816
90019	MC ALLEN, TX	0.780	0.821	0.792	0.505	0.802
90023	MIDLAND, TX	1.090	0.984	1.016	0.505	1.020
90002	NORTHEAST RURAL TEXAS	0.875	0.889	0.737	0.465	0.855
90013	ODESSA, TX	1.032	0.921	1.008	0.505	0.978
90025 90030	ORANGE, TX	0.991 0.815	0.959 0.852	0.896	0.505	0.949
900007	SAN ANGELO, TX SAN ANTONIO, TX	0.891	0.832	0.855 0.858	0.505 0.505	0.833 0.884
90007		0.891	0.919	0.754	0.494	0.871
90006	SOUTHEAST RURAL TEXAS TEMPLE, TX	0.876	0.870	0.734	0.505	0.871
90008	TEXARKANA, TX	0.813	0.901	0.716	0.505	0.824
90027	TYLER, TX	0.813	0.899	0.718	0.505	0.824
90032	VICTORIA, TX	0.906	0.867	1.090	0.505	0.911
90022	VACO, TX	0.900	0.869	0.717	0.505	0.910
90004	WESTERN RURAL TEXAS	0.922	0.848	0.680	0.447	0.825
90034	WICHITA FALLS, TX	0.876	0.872	0.805	0.505	0.863
91001	UTAH	0.971	0.935	0.917	0.741	0.950
78050	VERMONT	0.770	0.872	0.965	0.534	0.825
1049001	RICHMOND+CHARLOTTESVL, VA	0.901	0.952	0.898	0.464	0.897
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Carrier-		7 1		2551		
Locality		Physicians'	Employee	Office	Malpractice	Baseline
Code	Name	Own Time	Wages	Rent	Insurance	GMEI
1049004	RURAL VIRGINIA	0.867	0.887	0.756	0.518	0.856
1049003	SM. TOWN/INDUSTRIAL VA	0.882	0.891	0.763	0.538	0.867
1049002	TIDEWATER+N. VA COUNTIES	0.954	0.964	1.031	0.703	0.956
93004	E.CEN+NE WA (EXCL SPOKANE)	0.963	0.993	0.932	1.067	0.975
93002	SEATTLE (KING ONTY), WA	1.076	1.123	1.002	1.067	1.065
93003	SPOKANE+RICHLND(CITIES), WA	A 0.987	1.012	0.974	1.067	0.996
93001	W + SE WA (EXCL SEATTLE)	1.031	1.023	0.939	1.067	1.017
1651016	CHARLESTON, WV	0.947	0.955	0.926	0.690	. 0.939
1651018	EASTERN VALLEY, WV	0.847	0.902	0.707	0.716	0.853
1651019	OHIO RIVER VALLEY, WV	0.850	0.895	0.718	0.690	0.853
1651020	SOUTHERN VALLEY, WV	0.839	0.893	0.701	0.690	0.845
1651017	WHEELING, WV	0.898	0.920	0.751	0.739	0.890
95113	CENTRAL WISCONSIN	0.842	0.907	0.726	0.637	0.849
95140	GREEN BAY, WI (NORTHEAST)	0.917	0.944	0.762	0.637	0.899
95154	JANESVILLE, WI (S-CENIRAL)	0.880	0.912	0.779	0.637	0.876
95119	LA CROSSE, WI (W-CENTRAL)	0.895	0.915	0.837	0.651	0.892
95115	MADISON, WI (DANE COUNTY)		0.987	0.942	0.637	0.922
95146	MILWAUKEE SUBURBS, WI (SE		1.075	0.921	0.637	1.003
95104	MILWAUKEE, WI	1.031	1.074	0.929	0.637	1.000
95112	NORTHWEST WISCONSIN	0.879	0.915	0.752	0.652	0.874
95160	OSHKOSH, WI (E-CENTRAL)	0.896	0.937	0.767	0.637	0.888
95114	SOUTHWEST WISCONSIN	0.842	0.907	0.726	0.637	0.849
95136	WAUSAU, WI (N-CENTRAL)	0.882	0.918	0.746	0.637	0.875
553002	WYOMING	0.951	0.956	0.837	0.642	0.928

Table C-2. Alternative GMEIs

By State and Carrier Locality:

In Alphabetical Order

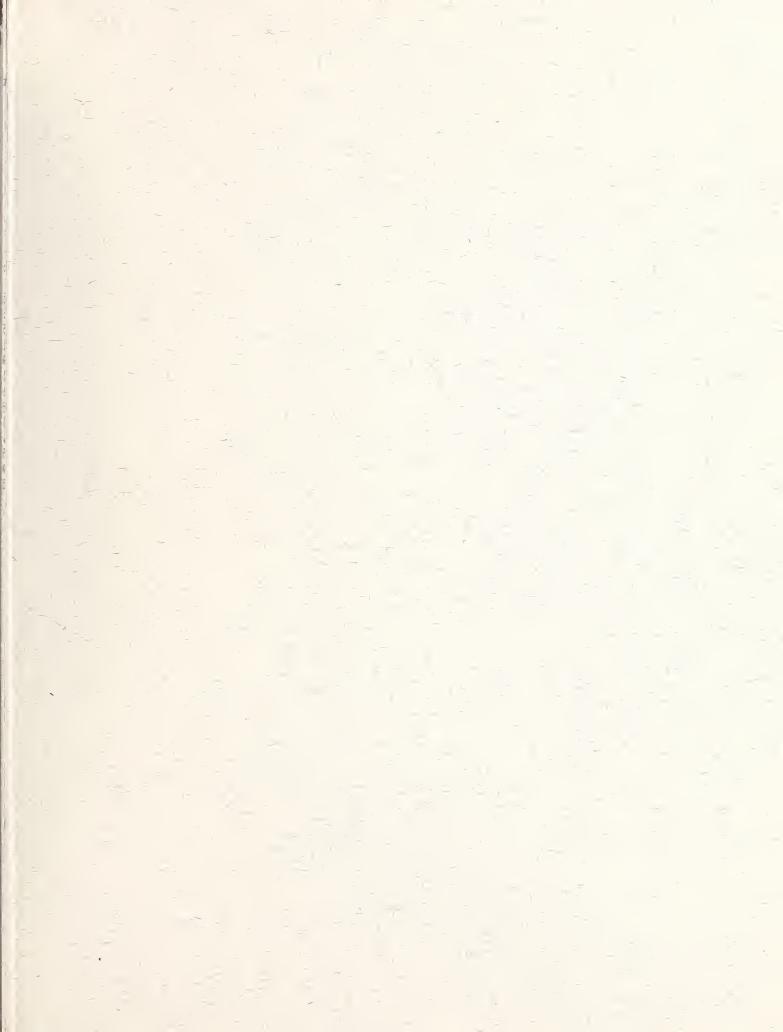
Carrier- Locality Code	Name	Baseline	Occup & Educ Adjust	Occup Adjust Only	Educ Adjust Only	Normanuf Workers	HCFA Hospital Wage	All Workers	Per Capita Income	Overhead Only
51005	BIRMINCHAM, AL	0.914	0.913	0.926	0.906	0.954	0.908	0.952	0.906	0.955
51002	NORTH CENTRAL AL	0.914	0.889	0.876	0.879	0.861	0.842	0.867	0.792	0.937
51002	NORTHWEST AL	0.906	0.911	0.870	0.879	0.879	0.807	0.874	0.792	0.938
51006	RIRAL AL	0.875	0.875	0.863	0.863	0.846	0.797	0.835	0.789	0.930
51003	SOUTHEAST AL	0.877	0.878	0.873	0.867	0.867	0.814	0.848	0.819	0.937
51004	MOBILE, AL	0.877	0.878	0.886	0.884	0.907	0.869	0.920	0.837	0.954
102001	ALASKA	1.335	1.342	1.347	1.323	1.448	1.350	1.413	1.360	1.105
103005	FLAGSTAFF (CTTY), AZ	0.942	0.944	0.934	0.946	0.970	0.914	0.950	0.809	0.979
103001	PHOENIX (CTTY), AZ	1.027	1.040	1.022	1.041	1.027	1.006	1.020	1.025	1.021
103007	PRESCOTT (CTTY), AZ	0.942	0.944	0.934	0.946	0.970	0.914	0.950	0.809	0.979
103099	RURAL ARIZONA	0.963	0.965	0.957	0.967	0.983	0.943	0.967	0.874	0.992
103002	TUCSON (CITY), AZ	0.981	0.975	0.982	0.979	0.994	0.985	0.981	0.964	1.010 16
103008	YUMA (CITY), AZ	0.942	0.944	0.934	0.946	0.970	0.914	0.950	0.809	0.979 3 6
52013	ARKANSAS	0.818	0.818	0.807	0.797	0.807	0.803	0.798	0.778	0.904 36
205026	ANAHEIM-SANTA ANA, CA	1.209	1.209	1.204	1.219	1.170	1.213	1.157	1.274	1.109 9 6
54214	BAKERSFIELD, CA	1.102	1.117	1.106	1.139	1.091	1.117	1.076	1.002	1.041
54211	FRESNO/MADERA, CA	1.038	1.046	1.028	1.052	1.039	1.071	1.023	0.984	1.025
54213	KINGS/TULARE, CA	1.018	1.005	1.007	1.049	0.976	1.034	0.964	0.923	1.021
205018	LOS ANGELES, CA (1ST OF 8)		1.229	1.228	1.223	1.184	1.239	1.164	1.180	1.100
205019	LOS ANGELES, CA (2ND OF 8)		1.229	1.228	1.223	1.184	1.239	1.164	1.180	1.100
205020	LOS ANGELES, CA (3RD OF 8)		1.229	1.228	1.223	1.184	1.239	1.164	1.180	1.100
205021	LOS ANGELES, CA (4TH OF 8)		1.229	1.228	1.223	1.184	1.239	1.164	1.180	1.100
205022	LOS ANGELES, CA (51H OF 8)		1.229	1.228	1.223	1.184	1.239	1.164	1.180	1.100
205023	LOS ANGELES, CA (6TH OF 8)		1.229	1.228	1.223	1.184	1.239	1.164	1.180	1.100
205024	LOS ANGELES, CA (7TH OF 8)		1.229	1.228	1.223	1.184	1.239	1.164	1.180	1.100
205025	LOS ANGELES, CA (8TH OF 8)		1.229	1.228	1.223	1.184	1.239	1.164	1.180	1.100
54203	MARIN/NAPA/SOLANO, CA	1.127	1.127	1.158	1.136	1.188	1.308	1.182	1.235	1.100
54210 54212	MERCED/SURR. CNTYS, CA	1.063	1.088	1.042	1.089	1.015	1.105	1.015	0.980	1.024
54201	MONIEREY/SANIA CRUZ, CA	1.114 1.057	1.106 1.058	1.085 1.057	1.112 1.075	1.079 1.070	1.161 1.143	1.064 1.055	1.099 · 1.056	1.064
54201 54202	N. COASTAL ONTYS, CA NE RURAL CA	1.019	1.026	1.011	1.038	1.007	1.143	0.996	0.928	1.017
54207	OAKLAND-BERKELEY, CA	1.186	1.186	1.206	1.191	1.246	1.349	1.234	1.261	1.124
54227	RIVERSIDE, CA	1.110	1.110	1.093	1.121	1.077	1.152	1.066	1.029	1.053
54204	SACRAMENTO/SURR. ONLYS, CA		1.121	1.126	1.128	1.124	1.175	1.103	1.052	1.056
54215	SAN BERNADINO/E.CENIRAL CA		1.107	1.090	1.118	1.075	1.149	1.064	1.027	1.052
205028	SAN DIEGO/IMPERIAL, CA	1.114	1.117	1.094	1.136	1.078	1.182	1.069	1.079	1.057
54205	SAN FRANCISCO, CA	1.224	1.225	1.242	1.222	1.285	1.446	1.259	1.429	1.143
54206	SAN MATEO, CA	1.224	1.225	1.242	1.222	1.285	1.446	1.259	1.429	1.143
205016	SANTA BARBARA, CA	1.076	1.092	1.069	1.099	1.063	1.108	1.056	1.089	1.050
54209	SANTA CLARA, CA	1.240	1.240	1.258	1.263	1.238	1.353	1.243	1.329	1.136
54208	STOCKTON/SURR. CNTYS, CA	1.073	1.055	1.045	1.071	1.072	1.136	1.063	0.988	1.032
205017	VENIURA, CA	1.147	1.147	1.149	1.173	1.114	1.193	1.093	1.125	1.074
55001	COLORADO	0.976	0.976	0.963	0.977	0.993	1.027	0.982	1.026	0.977
307004	EASTERN CONN.	1.022	1.010	1.021	1.023	1.008	1.051	1.026	1.110	1.025
307001	NW AND N.CENIRAL CONN.	1.035	1.026	1.033	1.022	1.044	1.068	1.043	1.138	1.030
307003	SOUTH CENTRAL CONN.	1.092	1.069	1.074	1.065	1.088	1.099	1.079	1.220	1.052
307002	SW CONNECTICUT	1.184	1.140	1.133	1.137	1.129	1.130	1.128	1.365	1.069
57001	DELAWARE	1.044	1.042	0.998	1.043	0.975	0.956	1.003	1.007	0.988
58001	D.C. + MD/VA SUBURBS	1.191	1.202	1.199	1.190	1.195	1.134	1.167	1.271	1.063
59003	FORT LAUDERDALE, FL	0.999	1.008	0.980	1.016	0.982	1.007	0.967	1.113	1.014
59004	MIAMI, FL	1.120	1.120	1.069	1.110	1.067	1.049	1.030	1.158	1.046
59002	NVNC FLORIDA CITTES	0.926	0.935	0.920	0.931	0.907	0.927	0.898	0.947	0.979
59001	RURAL FLORIDA	0.880	0.876	0.866	0.876	0.853	0.874	0.839	0.855	0.954

arrier- ocality Code	Name	Baseline	Occup & Educ Adjust	Occup Adjust Only	Educ Adjust Only	Normanuf Workers	HCFA Hospital Wage	All Workers	Per Capita Income	Overhead Only
311001	ATLANIA, GA	0.942	0.940	0.966	0.914	1.022	0.948	1.004	1.032	0.995
311004	RURAL GEORGIA	0.826	0.820	0.818	0.795	0.808	0.787	0.792	0.782	0.922
311002	SMALL GA CITIES 02	0.861	0.862	0.880	0.838	0.889	0.862	0.885	0.868	0.944
311003	SMALL CA CITIES 03	0.847	0.848	0.843	0.819	0.842	0.813	0.829	0.814	0.932
112001	HAWATI	1.046	1.041	1.050	1.047	1.064	1.093	1.044	1.060	1.039
513012	NORTH IDAHO	0.884	0.879	0.895	0.880	0.902	0.886	0.897	0.837	0.960
513011	SOUTH IDAHO	0.897	0.892	0.912	0.898	0.927	0.912	0.918	0.874	0.968
62110	CHAMPAIGN-URBANA, IL	0.899	0.902	0.910	0.881	0.946	0.923	0.942	0.899	0.976
62116	CHICAGO, IL	1.184	1.184	1.171	1.172	1.205	1.182	1.186	1.171	1.089
62103	DE KALB, IL	0.931	0.925	0.919	0.925	0.948	0.911	0.960	0.916	0.978
62111	DECATUR, IL	0.937	0.930	0.930	0.957	0.961	0.909	1.000	0.928	0.978
62112	EAST ST. LOUIS, IL	0 .97 9	0.981	0.988	0.999	1.014	0.996	1.029	1.024	1.003
62106	KANKAKEE, IL	0.917	0.923	0.926	0.933	0.946	0.909	0.970	0.912	0.978
62108	NORMAL, IL	0.988	0.995	0.985	0.989	0 .991	0.956	1.027	0.962	0.995
62101	NORIHWEST, IL	0.910	0.903	0.897	0.904	0.922	0.881	0.933	0.886	0.966
62105	PEORIA, IL	1.040	1.064	1.055	1.072	1.052	1.015	1.143	1.004	1.020
62107	QUINCY, IL	0.910	0.903	0.897	0.904	0.922	0.881	0.933	0.886	0.966
62104	ROCK ISLAND, IL	0.963	0.962	0.952	0.979	0.970	0.947	1.013	0.944	0.974
62102	ROCKFORD, IL	1.048	1.053	1.032	1.067	1.049	1.085	1.090	1.048	1.027
62113	SOUTHFAST IL	0.910	0.903	0.897	0.904	0.922	0.881	0.933	0.886	0.966
62114	SOUTHERN IL	0.910	0.903	0.897	0.904	0.922	0.881	0.933	0.886	0.966
62109	SPRINGFIELD, IL	0.986	0.982	0.985	0.977	1.010	0.984	0.999	0.994	0.994
62115	SUBURBAN CHICAGO, IL	1.105	1.105	1.095	1.102	1.133	1.120	1.136	1.144	1.061
63001	METROPOLITAN INDIANA	0.956	0.958	0.963	0.967	0.950	0.948	1.021	0.935	0.960
63003	RURAL INDIANA	0.887	0.883	0.879	0.886	0.864	0.856	0.898	0.853	0.932
63002	URBAN INDIANA	0.892	0.893	0.894	0 .898	0 .87 9	0.878	0.920	0.878	0.935
64005	DES MOINES (POLK/WARREN), IA		0.970	0.957	0.959	0.978	0.966	0 .97 9	1.022	0.968
64008	IOWA CITY (CITY LIMITS)	0.881	0.886	0.898	0.853	0.944	1.096	0.933	0.942	0.968
64003	NORTH CENTRAL IOWA	0.885	0.881	0.885	0.896	0 .86 4	0.878	0.920	0.884	0.948
64002	NORTHEAST IOWA	0.887	0.891	0.893	0.893	0.883	0.897	0.928	0.906	0.948
64006	NORIHWEST IOWA	0.870	0.863	0.855	0.863	0.854	0.858	0.867	0.865	0.937
64004	S.CEN. IA(EXCL DES MOINES)		0.848	0.845	0.855	0.838	0.838	0.853	0.852	0.934
64001	SE IOWA (EXCL IOWA CITY)	0.905	0.905	.0.899	0.916	0.904	0.910	0.934	0.904	0.953
64007	SOUIHWEST IOWA	0.868	0.865	0.867	0.865	0.872	0.871	0.880	0.889	
74005	KANSAS CITY, KA	0.948	0.946	0.969	0.944	1.025	0.999	1.026	1.040	0.996
65001	RURAL KANSAS	0.844	0.838	0.854	0.835	0.868	0.887	0.875	0.943	0.945
74004	SUBURBAN KANSAS CITY, KA	0.948	0.946	0.969	0.944	1.025	0.999	1.026	1.040	0.996
66001	LEXINGTON & LOUISVILLE, KY		0.923	0.934	0.932	0.913	0.919	0.941	0.955	0.948
66003	RURAL KENTUCKY	0.876	0.876	0.878	0.878	0.877	0.830	0.875	0.796	0.932
66002	SM CITIES (CITY LIMITS) KY		0.887	0.898	0.888	0.898	0.866	0.903	0.846	0.943
52807	ALEXANDRIA, LA	0.913	0.933	0.908	0.926	0.878	0.873	0.866	0.802	0.945
52803	BATON ROUGE, LA	0.956	0.943	0.966	0.950	0.995	0.937	1.011	0.955	0.976
52806	LAFAYETTE, LA	0.920	0.908	0.932	0.918	0.959	0.917	0.939	0.941	0.960
52804	LAKE CHARLES, LA	0.897	0.867	0.892	0.877	0.975	0.924	1.010	0.905	0.952
52805	MONROE, LA	0.896	0.889	0.918	0.894	0.889	0.877	0.895	0.830	0.941
52801	NEW ORLEANS, LA	0.998	1.000	1.012	1.013	1.036	0.947	1.029	1.008	1.012
52850	RURAL LOUISIANA	0.882	0.893	0.893	0.885	0.919	0.854	0.916	0.818	0.944
52802	SHREVEPORT, LA	0.971	0.973	0.950	0.956	0.955	0.916	0.952	0.930	0.965
120002	CENTRAL MAINE	0.820	0.817	0.826	0.812	0.828	0.858	0.823	0.839	0.945
120001	NORTHERN MAINE	0.834	0.838	0.834	0.825	0.843	0.859	0.846	0.842	0.949
120003	SOUTHERN MAINE	0.881	0.877	0.882	0.854	0.893	0.924	0.885	0.937	0.976
69001	BALTIMORE/SURR. ONLYS, MD	1.074	1.054	1.045	1.053	1.048	1.044	1.044	1.041	1.015
69003	SOUTH + E. SHORE MD	1.019	1.004	0.995	1.024	0.985	0.960	0.970	1.001	0.996
69002	WESTERN MARYLAND	1.012	1.012	1.017	1.029	1.009	0.978	1.019	1.000	0.998

Carrier- Locality Code	Name	Baseline	Occup & Educ Adjust	Occup Adjust Only	Educ Adjust Only	Normanuf Workers	HCFA Hospital Wage	All Workers	Per Capita Income	Overhead 000
aue	Name	Deserve	Aujust	CILLY	шц	WOLKELS	#age	WOLKELS	TIONE	Carry dos
70002	MASS. SUBURBS/RURAL(CITTES)	1.014	1.010	1.010	1.017	1.014	1.027	1.001	1.067	1.021
70001	MASSACHUSETTS URBAN	1.049	1.056	1.057	1.060	1.067	1.076	1.057	1.132	1.045
71001	DEIROIT, MI	1.205	1.205	1.220	1.214	1.159	1.139	1.215	1.120	1.078
71002	MICHIGAN, NOT DETROIT	1.024	1.022	1.029	1.034	0.997	0.998	1.044	0.949	1.003
72002	NORTHERN MINNESOTA	0.917	0.910	0.902	0.925	0.896	0.899 0.871	0.893 0.853	0.877	0.953
72004 1024001	SOUTHERN MINNESOTA ST. PAUL-MINNEAPOLIS, MN	0.900 1.026	0.891 1.032	0.880 1.015	0.904 1.035	0.850 1.027	1.043	1.030	0.867 1.079	0.946
1025001	RURAL MISSISSIPPI	0.828	0.826	0.815	0.794	0.807	0.778	0.785	0.737	0.995
1025002	URBAN MS (CITY LIMITS)	0.868	0.865	0.884	0.838	0.869	0.850	0.868	0.819	0.941
74003	K.C. (JACKSON COUNTY), MO	0.948 ·		0.969	0.944	1.025	0.999	1.026	1.040	0.996
74002	N. K.C. (CLAY/PLATTE), MO	0.948	0.946	0.969	0.944	1.025	0.999	1.026	1.040	0.996
1126003	RURAL (EXCL RURAL NW) MO	0.842	0.842	0.851	0.829	0.840	0.850	0.828	0.814	0.949
74006	RURAL NW COUNTIES, MO	0.855	0.853	0.868	0.840	0.870	0.869	0.858	0.848	0.956
1126002	SM. E.CTITES+JEFF.CNIY,MO	0.922	0.920	0.925	0.923	0.934	0.935	0.938	0.932	0.979
74001	ST. JOSEPH, MO	0.848	0.900	0.896	0.900	0.874	0.901	0.882	0.904	0.957
1126001	ST. LOUIS/LG. E.CTTIES, MO		0.987	0.998	1.007	1.019	1.014	1.033	1.038	1.007
75101	MONTANA	0.884	0.880	0.886	0.878	0.921	0.897	0.914	0.873	0.954
64501	OMAHA + LINCOLN, NE	0.877	0.874	0.893	0.857	0.926	0.923	0.919	0.953	0.940
64504	RURAL NEBRASKA	0.805	0.806	0.791	0.774	0.792	0.798	0.788	0.850	0.908
64503	URBAN (ONTY POP>25000) NE	0.819	0.818	0.812	0.789	0.819	0.822	0.814	0.870	0.914
129003	EKO & ELY (CITIES), W	0.985	1.013	1.031	1.000	1.050	1.030	1.023	1.010	1.019
129001	LAS VECAS, ET AL(CITIES), NV		1.103	1.089	1.087	1.084	1.076	1.063	1.058	1.041
129002	RENO, ET AL (CITIES), W	1.083	1.096	1.087	1.074	1.108	1.119	1.085	1.155	1.065
129099 78040	RURAL NEVADA	1.082 0.901	1.081 0.874	1.075 0.901	1.065 0.870	1.090 0.908	1.073 0.921	1.057 0.901	1.063 1.001	1.040 0.982
1331002	NEW HAMPSHIRE MIDDLE NEW JERSEY	1.119	1.119	1.096	1.135	1.074	1.039	1.060	1.116	1.045
1331001	NORTHERN NEW JERSEY	1.147	1.147	1.139	1.155	1.136	1.082	1.123	1.206	1.061
1331003	SOUTHERN NEW JERSEY	1.073	1.071	1.064	1.089	1.069	1.073	1.063	1.076	1.039
532001	NEW MEXICO	0.916	0.923	0.920	0.940	0.931	0.918	0.906	0.863	0.957
80101	BUFFALO/SURR. CNTYS, NY	0.987	0.986	0.986	1.005	0.941	0.946	0.985	0.945	0.975
80301	MANHATTAN, NY	1.279	1.280	1.294	1.252	1.286	1.317	1.252	1.249	1.151
80103	N. CENIRAL CITIES, NY	0.971	0.975	0.981	0.985	0.950	0.929	0.967	0.960	0.979
80302	NYC SUBURBS/LONG I., NY	1.276	1.276	1.286	1.262	1.251	1.304	1.221	1.273	1.146
80303	POUGHKPSIE/N.NYC SUBURBS	1.028	1.016	1.026	1.036	0.996	0.975	1.007	0.995	1.020
1433004	QUEENS, NY	1.279	1.280	1.294	.1.252	1.286	1.317	1.252	1.249	1.151
80102	ROCHESTER/SURR. ONTYS, NY	1.051	1.062	1.059	1.058	0.991	0.982	1.049	1.040	1.005
80104	RURAL NEW YORK	0.946	0.946	0.948	0.949	0.915	0.905	0.934	0.911	0.972
1334095	RURAL NORTH CAROLINA	0.839	0.839	0.832	0.831	0.826	0.814	0.807	0.815	0.918
1334094	URBAN (CITY LIMITS) NC	0.882	0.893	0.891	0.878	0.898	0.871	0.877	0.920	0.936
82001	NORTH DAKOTA	0.864	0.882	0.858	0.868	0.867	0.882	0.853	0.931	0.940
1636001	AKRON, OH	0.957	0.954	0.956	0.984	0.950	0.980 0.991	1.008 1.012	0.953 0.973	0.973 0.978
1636002 1636003	CINCINATI, OH CLEVELAND, OH	0.954 1.008	0.954 1.007	0.971 0.987	0.965 1.019	0.983 1.015	1.015	1.045	1.021	0.978
1636004	COLUMBUS, OH	0.941	0.941	0.953	0.933	0.981	0.932	0.988	0.967	0.978
1636005	DAYTON, OH	0.967	0.965	0.965	0.995	0.959	0.974	0.993	0.942	0.970
1636009	E. CENTRAL (STELBENVL), OH		0.905	0.903	0.911	0.905	0.894	0.983	0.866	0.960
1636007	MANSFIELD, OH	0.897	0.888	0.896	0.902	0.903	0.902	0.949	0.882	0.958
1636013	MARION + SURR. ONLYS., OH	0.896	0.888	0.890	0.894	0.898	0.887	0.939	0.863	0.960
1636006	NORTHWEST (LIMA) OH	0.905	0.895	0.902	0.909	0.906	0.916	0.960	0.887	0.963
1636014	SCIOTO VALLEY, OH	0.921	0.917	0.925	0.916	0.944	0.912	0.966	0.920	0.970
1636015	SOUTHEAST (OHTO VALLEY) OH		0.887	0.890	0.893	0.901	0.886	0.942	0.853	0.955
1636008	SPRINGFIELD, OH	0.981	0.980	0.979	1.013	0.971	0.990	1.004	0.958	0.972
1636010	TOLEDO (LUCAS/WOOD), OH	0.975	0.987	0.988	0.993	1.011	1.080	1.042	0.990	0.994
1636012	W. CENTR (LAKE PLAINS), OH	0.891	0.881	0.88 3	0.890	0.888	0.882	0.933	0.851	0.958

	rier- ality de	Name	Baseline	Occup & Educ Adjust	Occup Adjust Only	Educ Adjust Only	Normanuf Workers	HCFA Hospital Wage	All Workers	Per Capita Income	Overhead Only
63	6011	YOUNGSTOWN, OH	0.943	0.960	0.948	1.001	0.937	0.952	1.029	0.913	0.970
	7001	OK CTTY, ET AL (CTTTES),OK		0.887	0.920	0.864	0.946	0.974	0.937	0.990	0.957
13	7099	RURAL OKLAHOMA	0.853	0.848	0.857	0.826	0.850	0.841	0.845	0.852	0.923
13	7004	SM. CITTLES (NORTHERN), OK	0.838	0.830	0.850	0.802	0.845	0.833	0.839	0.863	0.922
13	7003	SM. CITTLES (SOUTHERN), OK	0.847	0.831	0.839	0.820	0.823	0.831	0.815	0.805	0.919
	7002	TULSA, ET AL (CITTES), OK	0.907	0.917	0.930	0.938	0.952	0.920	0.950	0.968	0.954
	8002	EUGENE, ET AL (CITIES), OR		0.925	0.946	0.937	1.004	1.027	1.018	0.908	1.001
	8001	PORILAND, ET AL (CITTES), OR		0.996	1.014	1.006	1.071	1.087	1.066	1.037	1.011
	8099	RURAL OREGON	0.950	0.952	0.962	0.954	1.005	1.025	1.015	0.934	0.996
	8003	SALEM, ET AL (CITTES), OR	0.937	0.932	0.952	0.922	0.992	1.010	0.996	0.906	0.994
	8012	SW OR. CITIES (CITY LIMITS)		0.962	0.948	0.953	0.984	0.991	0.996	0.892	0.992
	6502	LG. PENNSYLVANIA CITIES	1.037	1.036	1.043	1.052	1.041	1.053	1.056	1.040	1.021
	6501	PHILLY/PITT MED SCHS/HOSPS		1.063	1.069	1.077	1.070	1.080	1.081	1.064	1.032
1.4	6504	RURAL PENNSYLVANIA	0.918	0.912	0.924	0.932	0.925	0.925	0.936	0.894	0.970
W 16	6503	SMALL PENNSYLVANIA CITIES	0.938	0.930	0.940	0.947	0.941	0.942	0.954	0.913	0.974
	7001	RHODE ISLAND SOUTH CAROLINA	1.003	1.004	0.996	1.020	0.962	0.982	0.932	0.984	0.985
	8001 2002	SOUTH DAKOTA	0.855 0.818	0.855 0.816	0.848 0.811	0.838 0.801	0.838 0.790	0.813 0.823	0 .82 9 0 .78 3	0.803 0.840	0.919 0.925
	4035	TENESSEE	0.859	0.861	0.859	0.852	0.790	0.843	0.853	0.821	0.925
	0029	ABILENE, TX	0.860	0.801	0.845	0.854	0.841	0.842	0.827	0.021	0.924
	0026	AMARILLO, TX	0.872	0.885	0.880	0.892	0.901	0.881	0.894	0.943	0.932
	0031	AUSTIN, TX	0.891	0.898	0.919	0.887	0.919	0.990	0.904	0.971	0.959
	0020	BEALMONT, TX	0.949	0.937	0.942	0.983	0.965	0.928	1.020	0.969	0.954
	0009	BRAZORIA, TX	1.009	1.009	0.980	1.018	1.018	0.860	1.078	0.962	0.954
	0010	BROWNSVILLE, TX	0.885	0.891	0.875	0.837	0.805	0.845	0.782	0.694	0.927
	0024	CORPUS CHRISTI, TX	0.899	0.901	0.902	0.916	0.914	0.915	0.916	0.895	0.950
	0011	DALLAS, TX	0.952	0.952	0.960	0.953	0.995	0.969	0.984	1.078	0.961
	0012	DENION, TX	0.952	0.952	0.960	0.953	0.995	0.969	0.984	1.078	0.961
9	0014	EL PASO, TX	0.918	0.890	0.878	0.857	0.855	0.871	0.819	0.772	0.930
	0028	FORT WORLH, TX	0.888	0.889	0.907	0.889	0.914	0.917	0.913	1.012	0.947
	0015	GALVESTON, TX	0.921	0.921	0.963	0.903	0.985	1.002	1.004	0.989	0.960
	0016	GRAYSON, TX	0.855	0.861	0.866	0.883	0.864	0.833	0.876	0.908	0.933
	0018	HOUSTON, TX	1.004	1.004		1.028	1.056	0.978	1.049	1.064	0.974
	0033	LAREDO, TX	0.845	0.827	0.834	0.810	0.809	0.790	0.789	0.651	0.915
		· LONGVIEW, TX	0.873	0.857	0.868	0.842	0.886	0.833	0.909	0.912	0.944
	0021	LUEBOOK, TX	0.816	0.821	0.829	0.815	0.860	0.901	0.844	0.898	0.924
	0019	MC ALLEN, TX	0.802	0.842	0.810	0.813	0.797	0.794	0.775	0.658	0.921
	0023 0002	MIDIAND, TX	1.020	0.983	0.988	1.095	1.027	1.009	0.999	1.148	0.972
	0013	NORTHEAST RURAL TEXAS	0.855 0.978	0.850	0.856	0.836	0.859	0.835	0.852	0.889	0.923
	0025	ODESSA, TX ORANGE, TX	0.949	1.019 0.937	0.969 0.942	1.021 0.983	0.959 0.965	0.911 0.928	0.956 1.020	0.952 0.969	0.961 0.954
	0030	SAN ANGELO, TX	0.833	0.937	0.942	0.892	0.844	0.838	0.820	0.928	0.933
	0007	SAN ANIONIO, TX	0.884	0.894	0.904	0.885	0.878	0.860	0.857	0.920	0.944
	0003	SOUTHEAST RURAL TEXAS	0.871	0.867	0.872	0.856	0.875	0.849	0.868	0.882	0.929
	0006	TEMPLE, TX	0.859	0.860	0.838	0.862	0.834	0.838	0.814	0.845	0.927
	0008	TEXARKANA, TX	0.824	0.829	0.862	0.809	0.863	0.826	0.888	0.826	0.925
	0027	TYLER, TX	0.911	0.898	0.889	0.887	0.903	0.917	0.909	0.967	0.945
	0032	VICTORIA, TX	0.910	0.974	0.930	0.978	0.893	0.840	0.899	0.972	0.961
	0022	WACO, TX	0.878	0.879	0.861	0.877	0.836	0.845	0.826	0.886	0.920
	0004	WESTERN RURAL TEXAS	0.825	0.819	0.824	0.800	0.818	0.792	0.811	0.828	0.910
9	0034	WICHITA FALLS, TX	0.863	0.870	0.871	0.868	0.871	0.838	0.861	0.943	0.931
	1001	UTAH	0.950	0.961	0.943	0.949	0.970	0.941	0.954	0.841	0.966
	8050	VERMONT	0.825	0.827	0.849	0.817	0.840	0.878	0.850	0.869	0.950
104	9001	RICHOND+CHARLOTIESVL, VA	0.897	0.884	0.912	0.864	0.925	0.899	0.930	0.999	0.951

Carrier– Locality Code	Name	Baseline	Occup & Educ Adjust	Occup Adjust Only	Educ Adjust Only	Normanuf Workers	HCFA Hospital Wage	All Workers	Per Capita Income	Overhead Only
1049004	RURAL VIRGINIA	0.856	0.843	0.853	0.822	0.851	0.821	0.839	0.844	0.928
1049003	SM. TOWN/INDUSTRIAL VA	0.867	0.861	0.863	0.845	0.854	0.823	0.844	0.843	0.931
1049002	TIDEWATER+N. VA COUNTIES	0.956	0.960	0.972	0.959	0.969	0.952	0.967	0.997	0.981
93004	E.CENHNE WA (EXCL SPOKANE)	0.975	0.969	0.980	0.994	1.031	1.006	1.031	0.967	0.995
93002	SEATTLE (KING ONTY), WA	1.065	1.065	1.070	1.083	1.121	1.075	1.129	1.128	1.023
93003	SPOKANE+RICHLND(CITIES), WA	0.996	0.990	1.009	1.028	1.064	1.030	1.051	0.982	1.003
93001	W + SE WA (EXICL SEATILE)	1.017	1.018	1.012	1.034	1.044	1.013	1.053	0.988	1.000
1651016	CHARLESTON, WV	0.939	0.955	0.951	0.937	0.976	0.937	1.000	0.905	0.967
1651018	EASTERN VALLEY, W	0.853	0.860	0.869	0.853	0.932	0.848	0.924	0.787	0.936
1651019	OHIO RIVER VALLEY, WV	0.853	0.857	0.866	0.844	0.928	0.848	0.925	0.798	0.935
1651020	SOUTHERN VALLEY, W	0.845	0.852	0.862	0.836	0.938	0.842	0.919	0.780	0.933
1651017	WHEELING, WV	0.890	0.896	0.900	0.888	0.950	0.879	0.982	0.834	0.945
95113	CENTRAL WISCONSIN	0.849	0.843	0.852	0.849	0.821	0.854	0.836	0.838	0.935
95140	GREEN BAY, WI (NORTHEAST)	0.899	0.893	0.896	0.914	0.877	0.909	0.910	0.902	0.945
95154	JANESVILLE, WI (S-CENIRAL)		0.867	0.870	0.866	0.843	0.868	0.873	0.867	0.941
95119	LA CROSSE, WI (W-CENTRAL)	0.892	0.899	0.902	0.904	0.873	0.907	0.885	0.897	0.949
95115	MADISON, WI (DANE COUNTY)	0.922	0.944	0.964	0.926	0.981	0.988	0.967	1.033	0.971
95146	MILWAUKEE SUBURBS, VI (SE)		1.004	1.004	1.010	1.006	1.003	1.048	1.024	0.983
95104	MILWALKEE, WI	1.000	1.000	1.001	0.999	1.020	1.026	1.044	1.044	0.983
95112	NORIHWEST WISCONSIN	0.874	0.865	0.877	0.876	0.855	0.869	0.866	0.846	0.940
95160	OSHKOSH, WI (E-CENIRAL)	0.888	0.887	0.885	0.913	0.867	0.907	0.906	0.900	0.944
95114	SOUTHWEST WISCONSIN	0.849	0.843	0.852	0.849	0.821	0.854	0.836	0.838	0.935
95136	WALISALI, WI (N-CENTRAL)	0.875	0.895	0.867	0.877	0.839	0.872	0.863	0.848	0.939
553002	WYOMING	0.928	0.916	0.913	0.922	1.017	0.922	0.993	0.967	0.955







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